Volume 167 No. 23

# Oil, Paint and Drug Reporter

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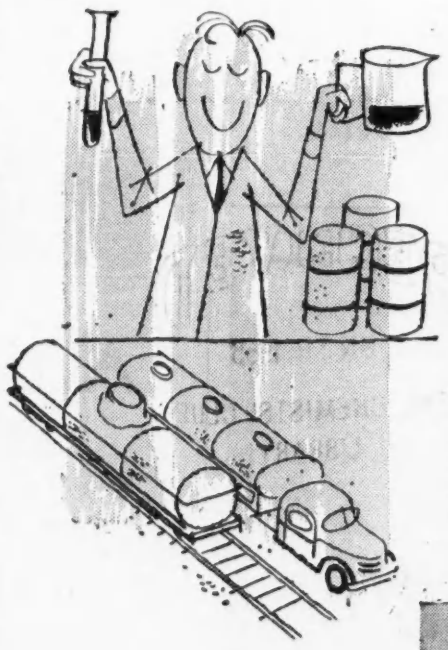

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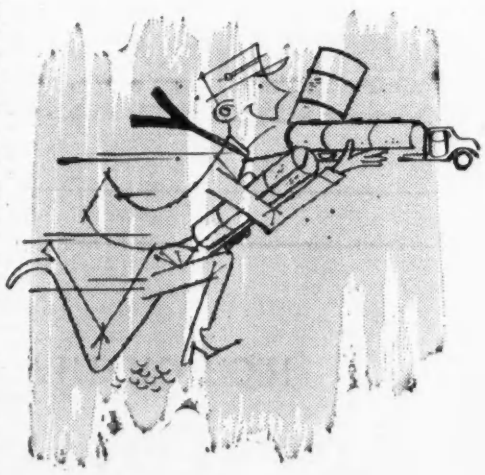

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# Oil, Paint and Drug Reporter

Volume 167 No. 25 — 30 Church Street, New York 7, N. Y. — June 20, 1955

## US Green Light to Sell GAF Asked by Kilgore

A new bill containing provisions which would permit the government to sell General Aniline & Film Corporation, New York, in advance of a court determination of the rightful owner of this property was introduced in the senate last week on behalf of the State department by Sen. Harley Kilgore of West Virginia.

The bill, S. 2227, is designed primarily to carry out the agreement announced several months ago for return of enemy property up to a value of $10,000 which was seized during World War II, including a provision creating a fund for payment of American war damage claims. Hearings are expected to be held on the bill soon.

**Provision Covering General Aniline**

The section of the bill that would open the way for sale of General Aniline is contained in provisions amending section 9 of the trading with the enemy act. This amendment would permit the sale of any vested property held subject to suit under section 9 upon a determination by the President that the interest and welfare of the United States so requires. Any claimant in the suit would be permitted to elect, after the sale, whether to take his share of the proceeds of sale, if successful in the suit, or to request a determination of just compensation.

Provisions for return of vested property up to a limit of $10,000 specifically excludes the return of patents and interests

—*Continued on page 70*

## Nickel Diverted to Industry As Stocks Sink to New Low

Diversion of 4,000,000 pounds of nickel to consumers, which had been scheduled for delivery to the national stockpile in the third quarter, was authorized last week by the Office of Defense Mobilization.

In a letter to the ODM requesting the diversion, Lothair Teetor, assistant Secretary of Commerce, stated that industry nickel stocks are now at their lowest level since 1952, notwithstanding recent releases of nickel from government shipments. He requested that additional supplies scheduled for delivery to the stockpile be made available to industry instead.

ODM said that it had authorized the diversion of 2,000,000 pounds in July; 1,000,000 pounds in August; and an additional 1,000,000 pounds in September to be diverted to private channels.

ODM also announced that it has deferred until a later date acquisition of 200,000,000 pounds of market price aluminum which was scheduled for the stockpile in the third quarter. At the same time the date for completion of deliveries of metal which under previous instructions was to be delivered not later than August 31, was extended to October 31.

Arthur S. Flemming, director of ODM, stated that he had requested a speedy completion of the current aluminum review to determine the desirability of the so-called "third round" expansion program. A decision within the next month can be expected, he said.

## FDA Is Planning to Ease Regulations on 2 Drugs

The Food and Drug Administration last week announced intentions to remove the prescription dispensing requirements from isoamylhydrocupreine and zolamine hydrochloride preparations and permit the sale of the products over-the-counter. Interested persons were given until July 10 to comment on the proposal.

The conditions under which the drugs would be allowed to be sold over-the-counter are these:—

The isoamylhydrocupreine and zolamine hydrochloride are prepared in dosage forms suitable for self-medication as rectal suppositories or as an ointment and containing no drug limited to prescription sale.

The isoamylhydrocupreine, zolamine hydrochloride, and all other components of the preparation meet their professed standards of identity, strength, quality, and purity.

If the preparation is a new drug, an application pursuant to section 505 (b) of the act is effective for it.

The preparation contains not more than

—*Continued on page 70*

## *Phosphate Plant Bought By International Minerals*

International Minerals & Chemicals Corporation, Chicago, last week announced that it had completed negotiations for the purchase of the Tennessee Valley Authority's Godwin phosphate plant at Columbia, Tenn. The company plans to expand its phosphate rock production in that area. The purchase price of the plant, which was sold through competitive bidding, was $635,000, according to Louis Ware, president of International.

The closing date for the sale is August 1, but the company will be allowed to begin renovating the plant earlier to achieve full operation by the end of the year. The rehabilitation is expected to cost $750,000. Production of 3,000 tons of ore daily from reserves in the vicinity is expected once the plant is in full operation.

## Antibiotics Industry Study Is On Agenda of the FTC

An economic survey of the antibiotics industry, particularly from the standpoint of pricing policies, has been scheduled by the Federal Trade Commission to be the next major study to be made by its Bureau of Economics, Edward F. Howrey, chairman of the commission, told the house judiciary committee last week.

Mr. Howrey pointed out that the products of this relatively new industry directly affect the lives and well being of all the people, but added that very little authoritative, comprehensive information has been made public.

The commission would be especially interested in knowing more about the industry's price mechanism and the seemingly wide disparities in price that appear to exist as between certain items, he stated.

Funds for economic studies by the FTC are now in dispute between the house and senate. In the FTC appropriation bill for the coming year, the house reduced the money for economic work. The senate restored the cut but said that part of it should be used for anti-merger work by the commission and part for the antibiotics study. A conference committee is now endeavoring to work out the differences between the senate and house in this matter.

## Trade Agreements Measure Over Congressional Hurdles

The administration's modified trade agreement extension bill, H. R. 1, finally cleared the legislative hurdles last week and was sent to the President for his signature. Adoption of the conference report on the bill in the house, by a roll-call vote of 347 to 54, was followed quickly by the senate also approving the report after a few hours of debate.

With completion of congressional action on the bill, congressional attention was turned immediately on another phase of the administration's trade program—H. R. 6040 modifying the customs laws to elminate many obsolete provisions and changing valuations procedures in the interests of simplification.

The ways and means committee of the house voted a favorable report on the bill without making the changes in the law urged by chemical industry spokesmen at hearings last month (OPD, 5/30/55). The bill eliminates the use of "foreign value" and makes "export value" the preferred method of valuing foreign merchandise for customs purposes.

To meet the protests of the bill's critics that the change in the valuation procedures would scuttle the anti-dumping law, the committee inserted an amendment directing the Treasury Department to make an investigation of the effectiveness of the anti-dumping law in the light of the proposed changes in the customs

—*Continued on page 71*

## TVA Fertilizer Production Ordered Reduced by House

The house appropriations committee last week ordered the Tennessee Valley Authority to cut back its plans for the production of diammonium phosphate next year to a maximum of 5,000 tons.

In a report to the house accompanying the TVA appropriation bill, for the fiscal year 1957, the committee stated as follows:—

"The TVA testified that it expected to manufacture 20,000 tons of diammonium phosphate fertilizer in 1956. It has come to the attention of the committee that industry has indicated a willingness to expand production of this important product and if this is the case most of the objectives sought by TVA in getting wider availability and use of the product will be accomplished. In view of this development the committee instructs that the TVA limit its production in the next year to 5,000 tons. The situation will be reviewed again next year."

## Miller Law Exemptions To Be Granted by FDA

The Food and Drug Administration last week announced plans to grant temporary exemptions of agricultural pesticides from the residue tolerance requirements of the Miller pesticide law upon application of manufacturers or distributors. The exemption will extend only until October 31 and must be applied for by June 27.

The Miller law prohibiting the marketing of a raw agricultural commodity sprayed with a pesticide for which a tolerance has not been issued, or which has not been exempted from the requirement that a tolerance be established, becomes fully effective on July 22. The Secretary of the Department of Health, Education and Welfare may extend this date on a product-by-product basis for upwards of one year upon a finding that conditions exist that necessitate an extension.

Over the past nine months numerous tolerances for residues of pesticide chemicals—and some exemptions from the requirement of a tolerance—have been established. However, tolerances or exemptions have not been established for some pesticide chemicals that are employed in agriculture, and it is not possible at this time to determine whether tolerances will be established for them before the end of the current growing season.

**Some Pesticides Recommended**

Some of these pesticides have been recommended by certain state officials for use on crops throughout the 1955 growing season. Agriculturists, pesticide manufacturers and distributors, and food law enforcement officials need to know the status of these pesticides prior to July 22 when the law becomes fully effective, so that they will know whether the pesticides should be employed throughout the 1955 growing season.

In the announcement, HEW said that it was prepared to consider requests for an extension of the effective date of the law for specific pesticides, and the following criteria, among others, will be used in evaluating and acting upon such requests:—

- There should not be an extension of the effective date of the law for uses of pesticide chemicals for which tolerances have already been established.
- The effective date of the amendment should be extended for a pesticide chemical only upon a finding, based on a study of the available facts about the chemical and its toxicity, that the inter-

—*Continued on page 70*

## Vaccine Financing Hearings Are Set by House Committee

The house interstate commerce committee will begin hearings June 22 on legislation proposed for federal financing of the polio vaccine immunization program with indications that it intends to give close consideration to the policy aspects of the problem. Several bills are pending before the committee, including proposals to make the vaccine available free to all children and the administration's measure that free shots be administered to needy children.

Members of the committee are reported concerned over the implication attached to a program of government-sponsored immunization and they want to explore the matter fully before they vote its approval. They point out that when congress passes a law specifically mentioning a product as in this case the Salk vaccine, it is in effect a warranty to that vaccine.

Some of the committee members question the advisability of taking this step in the light of the development work still going on. It is pointed out that the Salk vaccine is only 60 percent effective in the case of type I polio; therefore it is questionable whether congress would want to encourage a mass immunization program with a product of limited effectiveness. This is especially true, it is added, when the possibility exists that a vaccine which would be nearly 100 percent effective might be developed in a year or two.

These and other questions of similar importance are expected to be put to a panel of experts being drawn up by the National Research Council at the committee's request to attend the opening hearings.

## Government Ahead by Rubber Plants Sale to the Tune of Over $10,000,000

Sale of the synthetic rubber plants to private industry has produced a profit to the government of over $10,000,000 over and above the total net cost of the program, latest figures of the Pettybone disposal commission showed last week. This amount will be increased further, it was stated, when the pressure tankcars now on hand are disposed of.

Notation of the profitable operation of the disposal commission was made in a report to congress recommending sale of the Baytown, Tex., GR-S copolymer plant to the United Carbon Company for $7,153,000. United Carbon was one of nine bidders for the plant when it was re-advertised for sale under special legislation a month ago.

**Congress Reviewing Baytown Sale**

Additional payments by United Carbon at the time of transfer for various inventories and net additions to the plant are estimated at $1,491,000, which will bring the total receipts from the Baytown sale to $8,644,000. Congress has thirty days to review the Baytown sale. It would be the twenty-fifth of the twenty-seven plants to be sold. The other twenty-four plants were sold last March.

Remaining unsold at this time, is the 87,000-ton alcohol butadiene plant at Louisville, Ky., and the 122,000-ton GR-S plant at Institute, W. Va. The alcohol butadiene plant has been leased to Publicker Industries, Inc., for $1,000 a month plus $6 per ton of butadiene produced. The Institute plant has been placed in standby.

In arriving at the $10,000,000 profit, the report of the commission pointed out that the net book value of all plants and other assets in the synthetic rubber production program was estimated at $128,088,000, and the government's operating deficit since the start of the program during World War II amounted to $132,700,00, or a total of $260,788,000.

**Breakdown of Cash Return**

Including the sale price of the Baytown plant, the total amount to be realized from sale of the twenty-five plants will be $270,796,000, or a little over $10,000,000 in excess of the total net cost of the program. Altogether the government will realize about $415,000,000 from transfer of the producing facilities to private ownership. This includes about $145,000,000 from sale of inventories, spare parts, net additions to plants, and finished rubber, plus the return from the operating agency's balance.

A further cash return to the government will result from the disposal, which the commission is now negotiating, of some or all of the 447 pressure tankcars still owned by the government. Their net book value is $1,008,000, which is included in the overall book value figure of $128,088,000 mentioned above. The commission has received eleven offers for the tankcars.

# FTC's Hand Stronger In New Sparkman Bill

Sen. John Sparkman of Alabama, chairman of the senate small business committee, introduced a bill in the senate last week to strengthen the enforcement provisions of the Clayton act to enable the Federal Trade Commission to obtain speedy, effective compliance with its cease-and-desist orders.

Two important changes in the law are proposed. First, the law's enforcement procedures are brought into line with those being used by the commission to enforce orders issued under section 5 of the FTC act. Second, violation of Clayton act orders is made subject to the same civil penalties now applicable to violation of FTC act orders.

Sen. Sparkman said that a study has shown that compliance with cease-and-desist orders under the Clayton act is seriously impaired by the cumbersome procedures which must be followed and by the lack of teeth in such procedures. He went on to explain differences in enforcement procedures under the Clayton act and the FTC act.

"An order issued pursuant to section 5 of the FTC act," he pointed out, "becomes final and conclusive sixty days after its issuance, unless the respondent seeks review by a US Court of Appeals. When court review is sought, the order becomes final upon the court's affirmance of the order. Once such an order has become final, either through lapse of time or court affirmance, its violation, for each and every day, is punishable by a fine or not more than $5,000.

"On the other hand," he went on, "commission orders issued pursuant to

—Continued on page 71

# Larrick Drops Clues to FDA Additive Legislation Thinking

Several clues to Food and Drug Administration thinking on pending chemical additives legislation were dropped last week by George P. Larrick, Commissioner of Food and Drugs, in an address before the fifteenth annual meeting of the Institute of Food Technologists at Columbus, Ohio.

Pointing out that he was still unable to give the agency's position on any given bill or provision because FDA is now working on a statement for the house interstate and foreign commerce committee, Mr. Larrick, nevertheless, strongly hinted at some of the agency's attitudes on the whole additives subject.

For example, he called attention to the fact that extension of the tolerance concept of the Miller pesticides amendment to food additives would mean "that harmless amounts of scores or perhaps hundreds of different toxic materials will find their way into the nation's food supply." Thus, he said, the total intake of any given additive and related substances from all sources must be considered if the tolerance idea is to be adopted.

Mr. Larrick also implied that FDA has just about made up its mind on the safety question, indicating that the agency favors the making of a safety decision administratively before the chemical additive may be marketed. In support of such an approach, he said, is the fact "that the safety decision is essentially a scientific one." Therefore, he felt that "the pattern of the pesticide amendment should be followed" in order to prevent a situation "in which a potentially harmful product continues on the market while the judicial process is going on."

# Mellon Institute Will Have Gen. Ridgway as Chairman

Gen. Matthew B. Ridgway last week was named chairman of board of trustees of Mellon Institute of Industrial Research, Pittsburgh, Pa., and will assume his duties about the middle of September. Gen. Ridgway, army chief of staff, is retiring June 30. Dr. Edward R. Weidlein, president of the institute, has been filling the post of chairman as well. He will continue as president and as a member of the board after Gen. Ridgway assumes his duties, and will devote more of his time to specific research.

# Thiophene Availability Told

Thiophene is now available in commercial quantities, Sharples Chemicals Inc., Philadelphia, a subsidiary of Pennsylvania Salt Manufacturing Company, has announced. Commercial production of thiophene was brought on stream this month in the new plant facilities operated by Index Chemical Company, Houston, Tex., a subsidiary acquired by Pennsalt in January.

# Contents of This Issue


### Association News

ASTM Program to Feature Symposiums.... 7
Canadian Toilet Goods Ass'n Elects Williams. 7
Chemical Ass'n Sets Golf Dates..... 42
CSMA Annual Meeting Proceedings Available 38
Merritt-Chapman Files Fiscal Data..... 53
Nat'l Science Foundation Details Grants.... 51
N.E. PVLA Annual Outing Set..... 66
Oil Chemists' Group Plans Analytical Course 7
Parenteral Drug Meeting Set..... 7
Plant Food Institute Elects Howell..... 7
Sen. Sparkman Will Address Trade Board.. 7

### Government News

Agricultural Conservation Plans Unchanged. 62
Business in March, 1955..... 7
Celler to Urge Tighter Rein..... 5
FDA Is Planning Drug Requirements Easing. 3
FTC's Hand Stronger in New Bill..... 4
FTC Hits Food Group on Competition..... 61
Glass Container Shipments: April..... 66
Government Profits by Rubber Sale Reported 3
Larrick Gives Clues to FDA Legislation.... 4
Miller Law Exemptions Granted..... 3
Petroleum Crudes Output, Sales Increased.. 49
Tariff Commissioner Ckayed..... 56
Tetracycline Rules Amended..... 56
Trade Agreements Measure Is Over Hurdles. 3
TVA Diammonium Phosphate Production Cut. 3
US Elastomers Production Declined..... 5
US Green Light to Sell GAF Asked..... 3
US Revenue Returns: March..... 37
Vaccine Financing Hearings Planned..... 3

### Industry News

ACTH Makeup Learned..... 56
Acrolein Development Told at Parley..... 5
Aerosol Sales, Shipping Data Offered..... 52
Aluminum Sulfate Plant Set by Gen'l Chem. 4
American Cyanamid Awards Scholarships.. 52
American Cyanamid Is Awarding Scholarships 42
Anti-Hog-Cholera Agency Budget Published 31
Antibiotics Industry Study on FTC Agenda. 3
Arizona Chemical Places Still on Stream... 42
Barrett Purchases Land in Ohio..... 36
Brown Starts Bleach Plant..... 31
Chemical Construction Ends Lawsuit..... 53
Chemical Merger Reasons Laid to Growth.. 5
Colombia Cuts Caustic Soda Duty..... 31
Diamond Chromic Acid Plant Starts..... 5
Grace & Co. to Sell Glidden Paints in S. A.. 62
Insecticide Value Reported..... 37
Isocyanate Chemicals Plant Seen in Oct.... 4
Lion Completes Well in Kansas..... 37
Metal Cans Shipments: April..... 51
Metal Mercury Advances Announced..... 37
Monsanto Unit Operating by End of Summer 4
Naphthalene Items Make Debut..... 5
Nickel Diverted to Industry..... 3
Pentaerythritol Facility Set by Heyden..... 5
Phosphate Plant to Int'l Minerals..... 3
Porter Buys Vulcan Crucible..... 37
Protective Coating Output: April..... 59
Premium Chemicals Formed for Research.. 58
Steel Shipping Barrels: —November..... 50
Surface Chemicals Expands Line..... 66
Synthetic Lubricant Report Announced..... 38
Taussig Paint Co. Formed..... 62
Texas Eastman to Expand "Oxo" Plant..... 36
Thiophene Availability Told..... 4
1-Tryptophane Made by Sheffield..... 5

### International News

Argentine Tung Oil Output Announced..... 7
Chas. Pfizer Forms Japanese Drug Firm.... 50
Ferro Corp. Reports Promotion of Felker.. 66
Int'l Chemistry Group Plans to Meet..... 7
Nat'l Lead Sets Up English Firm..... 5
Spain Gets Cottonseed Oil..... 7

### Personnel News

American Synthetic Rubber Names Manager 5
Amsco, Western, Names Pres..... 62
Atkinson, Pfizer P.A., Honored..... 61
Bush Is Baird Aromatics Head..... 57
Calumet Fills Post..... 5
Cyanamid Names Plastics Mgr..... 62
Davis Is Nopco Vice-Pres..... 62
Drake Takes Over Pennsalt Presidency..... 5
Emery Industries Appoints..... 50
Mellon Institute Makes Ridgway Chairman. 4
Moffat Is Mexican Gulf Sulfur V. P..... 7
Monsanto Promotes Two in Organics..... 42
Penick Vice-Pres. Retires..... 51
Pittsburgh Coke Chooses Officers..... 56
Sharpe & Dohme Appoints Sinotte..... 53
Stanford Research Appoints Lab Manager.. 38
Stokes Is van Ameringen Appointee..... 5
Texas-U. S. Chemical Co. Post to Brown.... 4

### Market Reports

Acids ..... 34
Agricultural Chemicals..... 43
Aromatic Chemicals..... 47
Botanical Drugs, Gums..... 56
Coal Chemicals..... 44
Drugs ..... 47
Essential Oils ..... 56
Fats and Greases..... 64
Fertilizer Materials..... 43
Fine Chemicals..... 47
Heavy Chemicals..... 34
Industrial Organic Chemicals..... 40
Lacquer Materials..... 59
Leather Chemicals..... 63
Naval Stores..... 59
Oil Cake and Meal..... 64
Oils ..... 64
Paint Materials..... 59
Pesticides ..... 43
Petrochemicals ..... 40
Petroleum Derivatives..... 39
Protective Coatings Materials..... 59
Spices ..... 56
Textile Chemicals..... 63
Waxes ..... 64

### General Features

Advertisers Index..... 71
Association Meeting Dates..... 7
Bids Wanted..... 49
Book Reviews..... 55
Classified Advertisements..... 70
Consulting Chemists and Engineers..... 55
Coal Chemicals Output..... 44
Crude Oil Stocks..... 39
Current Market Quotations..... 9
Editorials ..... 32
Imports ..... 52
Obituaries ..... 61
OPD Price Index..... 4
Trade Briefs..... 58, 70
Washington Talks It Over..... 32


# Texas-U.S. Chemical Co. Top Board Post to Brown

Ernest G. Brown, vice-president of United States Rubber Company, has been elected chairman of the board of directors of Texas-U.S. Chemical Company. Mr. Brown succeeds John P. Coe, who will retire on June 30. Mr. Brown will relinquish his post as general manager of the mechanical goods division of U.S. Rubber, but will continue as a vice-president. Texas-U.S. Chemical Company is owned jointly by Texas Company and U. S. Rubber. It owns and operates a synthetic rubber plant and has an undivided one-half interest in a butadiene plant in Port Neches, Tex.

Mr. Brown joined the rubber company in 1929 in its central planning and engineering departments in New Haven, Conn. He was made factory manager of Bristol, R.I., plant in 1931 and production manager of the mechanical goods division in 1941. During World War II he served as general manager of the company's munitions division. He was made general manager of the mechanical goods division in 1944 and became a vice-president in 1945.

# Monsanto Polyethylene Unit Operating by Summer's End

An interim plant for the production of a new high-density, boilable polyethylene plastic will be in operation by the end of the summer at Monsanto Chemical Company's Texas City, Tex., plant, according to R. K. Mueller, vice-president and general manager of the plastics division. A small pilot plant producing the new product has been in operation at Monsanto's chemical research department at Dayton, Ohio, for several months, Mr. Mueller said.

# Aluminium Sulfate Facility Planned by Gen'l Chemical

Plans for a new liquid aluminum sulfate plant at Tacoma, Wash., as well as completion of a major addition to one at Kennewick, Wash., were announced last week by General Chemical Division of Allied Chemical & Dye Corporation, New York.

The Tacoma plant will be the first for production of liquid aluminum sulfate in the Puget Sound area. Its output will go entirely to pulp and paper mills throughout the territory. The company has the site for the new plant under option and expects to have the plant in operation by late summer.

The new Kennewick plant is an addition to General Chemical's Hedges works. The recently-completed unit was built primarily to supply liquid aluminum sulfate for process uses of the atomic energy installation at Hanford.

# Isocyanate Chemicals Plant Seen on Stream in October

The first full-scale production plant in America for the manufacture of isocyanate chemicals, now being built at New Martinsville, W. Va., is more than 40 percent complete and production should start in October, David L. Eynon, president of Mobay Chemical Company, said last week.

The new plant will be capable of producing several hundred tons of isocyanate chemicals a month and equivalent amounts of polyester resins, Mr. Eynon said. Until the new plant is in operation, Mobay is supplying the chemical raw materials from an interim plant at Anniston, Ala., and from imports of the chemicals from Farbenfabriken Bayer, A. G., of Germany, which along with Monsanto Chemical Company, St. Louis, Mo., is the parent firm of Mobay.

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# Price Index Edges Lower

The overall OPD price index last week moved down by 0.01, to stand at 106.75.

Price advances for zinc oxides, which had been initiated earlier, appeared in the market price box for the week because one maker made its advances effective June 15. The protective coatings section also noted that phenolic resins were advanced by a major producer. The shellac market was steady, with a firm attitude displayed on the part of holders in Calcutta.

Further reductions in the silver bullion market were noted in the heavy chemicals section, while the drugs and fine chemicals group reported lower silver salts quotations. The reductions, which were made for silver cyanide and silver nitrate, were the latest in a series of price changes in recent weeks. However, mercury salt prices were not yet affected by the continued decline in mercury metal prices.

The heavy chemical market reported an advance for silver. Chromic acid prices were adjusted to allow freight equalization with a new producing plant in the midwest. Less carlot and less truckload prices were changed from a works basis to delivered, in the New York area.

Animal proteins were generally soft, with the exception of dried blood and tankage at Chicago, it was reported in the agricultural chemicals group. Reductions were posted for bonemeal, fishmeal, fishscrap and hoofmeal. Higher-priced vegetable meals firmed the market for blood and tankage, as soybean meal recovered slowly after having reached its lowest levels in several years.

The benzol market maintained strength on the basis of sales to styrene manufacturers, it was stated in the coaltar market. Toluol and xylol were available in good volume, but demand from insecticide and alkyd resin producers, respectively, helped to maintain even demand. Styrene monomer had a record sales month in May. Dodecylbenzene prices were reduced ½ cent per pound.

Price activity in the industrial organic chemicals group centered about formaldehyde, where producers followed the fractional increase started the previous week by one producer. All sources had not gone along before press-time, leaving a range in schedules for some grades. Related products did not seem to be affected by the formaldehyde price move.

Scarcity of crude cottonseed oil strengthened the oils, fats and waxes market and light sales took place at a fractional advance. This was reflected in other edible oils. Corn also was higher. Trading in edible grades was moderate, chiefly for nearby requirements.

The essential oils market noted a sizable advance for both Jamaican and Mexican pimento. At the same time, a large number of essential oils declined, along with Bourbon vanilla beans. There were no price changes in the petroleum derivatives or in the textile and leather chemicals groups.

### Prices Advanced

Cocoa butter, 4c. per lb. (64).
Copra, $5 per ton (64).
Coriander seed, Roumanian, ½c. per lb. (56).
Ginger, African, 1c. per lb. (56).
Mace, East Indian, siftings, 3c. per lb. (56).
Nutmeg, East Indian, 3c. per lb. (56).
West Indian, 2c. per lb.
Oil, coconut, crude, ⅜c. per lb. (64).
Corn, crude, ¼c. per lb. (64).
refd., ¼c. per lb.
Cottonseed, crude, ⅛c. per lb. (64).
refd., ⅛c. per lb.
Oiticica, ¼c. per lb. (64).
Oleo stearine, ½c. per lb. (64).
Pimento, Jamaican, 21c. per lb. (56).
Mexico, 10c. per lb.
Soybean meal, 50c. to $1 per ton (64).
Tin, 2¼c. per lb. (34).
Wax, Japan, 1c. per lb. (64).
Zinc dust, ½c. per lb. (59).
Metal, ½c. per lb. (34).
Oxide, pigment, American process, lead-free, ½c. per lb. (59).
leaded 35%, ½c. per lb.
50%, ¼c. per lb.
USP, ½c. per lb. (47).

### Prices Reduced

Acid, lauric, ¾c. per lb. (64).
Bonemeal, $2.50 per ton (43).
Fishmeal, $3 per ton (43).
Fishscrap, $3 per ton (43).
Hoofmeal, 25c. per unit-ton (43).
Oil, bois de rose, 10c. per lb. (56).
Clove, USP, 10c. per lb. (56).
Cubeb, 25c. per lb. (56).
Garlic, 25c. per lb. (56).
Lemongrass, 25c. per lb. (56).
Neroli, Spanish, $2.50 per lb. (56).
Peppermint, 25c. per lb. (56).
Petitgrain, 30c. per lb. (56).
Sassafras, art., 5c. per lb. (56).
Soybean, foots, 95%, ¾c. per lb. (64).
Spearmint, 15c. per lb. (56).
Tansy, 25c. per lb. (56).
Phenobarbital, USP, 50c. per lb. (47).
Phenobarbital-Sodium, 50c. per lb. (47).
Silver, ½c. per lb. (34).
Cyanide, ½c. per lb. (47).
Nitrate, ⅜c. per lb. (47).
Vanilla beans, Bourbon, 25c. per lb. (56).
Wax, carnauba, Ceara, crude, 2c. per lb. (64).
refd., 2c. per lb.

### OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100—1949 average)

| June 17, 1955 | June 10, 1955 | June 18, 1954 |
|---|---|---|
| **106.75** | **106.76** | **106.76** |

# Celler to Urge Tighter Rein on Consolidations

A bill to strengthen the government's veto over corporate mergers is being prepared by the staff of the house monopoly investigating committee, Chairman Emanuel Celler of New York disclosed last week as additional testimony was received by the committee from top government officials for tightening the antitrust laws over consolidations.

Mr. Celler said that he had instructed the staff to prepare an amendment to the antitrust laws that would require advance notice to be given to the Attorney General of all mergers in which one of the merging companies has assets of $1,000,000 or more; and to require actual approval of the Federal Trade Commission of any merger involving companies having assets of $10,000,000 or more.

Under the Clayton act it is unlawful for one company to acquire the controlling stock or assets of another, where the result will be to lessen competition substantially or create a monopoly. The law does not require prior notification of proposed mergers or the commission to take action one way or the other before the merger is consummated.

**Martin Sanctions Idea**

Latest in the line of high government officials to sanction the pre-notification idea—first advanced by Sen. John Sparkman of Alabama in a bill he introduced in the senate a week ago—was William McChesney Martin, chairman of the Federal Reserve Board, in testimony to the Cellar subcommittee last week. He was concerned chiefly about bank mergers, however.

He proposed that each of the federal bank supervisory agencies be authorized to go directly to the Attorney General on any question involving undue lessening of competition through bank mergers and consolidations, and recommended also that responsibility for enforcement of the antitrust laws be vested exclusively in the Attorney General and not the board of governors of the Federal Reserve System.

H. Earl Cook, chairman of the Federal Deposit Insurance Corporation, also expressed the desirability of more careful screening of merger and acquisition transactions among banks and suggested that the job be divided among the supervisory agencies.

## Naphthalene Items Make Their Commercial Debut

Millmaster Chemical Corporation, New York, the selling agents, and F. O. Cockerille, Greenwood, Va., the manufacturer, are offering, for the first time commercially, five alpha-substituted derivatives of naphthalene. They are:—a-naphthalenemethanol (a-naphthyl carbinol), a-naphthaldehyde, a-naphthaleneacetonitrile, and a-naphthaleneacetamide. The properties of these compounds have already suggested them for use as intermediates in new agricultural chemicals, pharmaceuticals, perfumes, or fixatives, cosmetics, and dyestuffs, and wherever else they may serve as possible improvements over their benzyl analogs, it was stated.

Also available from Cockerille, in research qualities, are alpha-substituted derivatives of naphthalenemethanol—such as mercaptan, thiocyanate, sulfonic acid salts, various amines and a number of esters, ethers, and thioethers.

## American Synthetic Rubber Appoints Holmes Sales Mgr.

Joseph W. Holmes has been named sales manager of American Synthetic Rubber Corporation, New York, effective July 1.

Prior to his appointment, Mr. Holmes was director of sales of Jefferson Chemical Company, a subsidiary of American Cyanamid Company and Texas Company. Mr. Holmes was previously manager of sales and technical service and executive assistant to the president and managing director of Polymer Corporation, Sarnia, Ontario. Before joining Polymer, Mr. Holmes handled sales of rubber chemicals, neoprene and carbon black for Canadian Industries, Ltd.

## Pentaerythritol Facility Set For Coming Year by Heyden

Heyden Chemical Corporation, New York, has announced that it will build a new pentaerythritol plant which, it is estimated, will cost $4,000,000 and will be in production by the end of 1956. The new plant will be the fourth major expansion by Heyden in this field since the construction of its first commercial pentaerythritol plant at the Garfield, N. J., division in 1939.

## *van Ameringen Appointee*

Sydney N. Stokes has been named to the new post of assistant to the executive vice-president of van Ameringen-Haebler, Inc., New York. He will assume his new duties on August 1. Mr. Stokes was regional sales manager for Merck & Co. in New York. He had been associated with Merck for twenty-one years in various executive capacities in sales, sales promotion, distribution and administration.

## Acrolein Development Told At World Petroleum Meeting

A practical route to a "pyramid of chemical intermediates" useful in making a host of products from plastics to pharmaceuticals has been opened by new research in the chemistry of acrolein. The studies were described in a paper read by G. W. Hearne of Shell Development Company, a subsidiary of Shell Oil Company, New York, at the World Petroleum Congress concluded last week in Rome.

The detailed studies on acrolein were undertaken because research begun years earlier by Shell had cleared the last obstacles to efficient, large scale production of the material. Many of the products made during the studies had not been known before, while other, although known, had been obtainable only through complex, costly synthesis. According to the report, acrolein is destined to occupy a place alongside ethylene oxide, acetone and allyl chloride as a petrochemical serving almost all branches of the chemical industry.

In conjunction with the Shell discovery, which permits the commercial production of acrolein from air and propylene, Shell Chemical Corporation announced plans for the construction of an acrolein plant at Norco, La. Acrolein participates in reactions of the Diels-Alder type, in which it serves either as a diene or dienophile or forms a dimer by combining both functions, the report stated. The products from these primary reactions in many

—Continued on page 68

## William Drake Takes Over Pennsalt Presidency July 1

Executive vice-president William P. Drake will succeed George B. Beitzel as president of the Pennsylvania Salt Manufacturing Company, Philadelphia, on July 1. Mr. Beitzel will continue his association with the company as a member of its board and, in addition, will serve as chairman of the board of the Pennsalt International Corporation, a subsidiary. In this capacity he will serve additionally as a special representative of and adviser to

William P. Drake

Pennsalt International Corporation president Richard L. Davies, and will devote much of his time abroad in the interest of Pennsalt's import-export trade and foreign operations. He joined the company in 1930 as a product sales manager and became its chief executive in 1949.

At forty-two years of age, Mr. Drake will be the youngest president in Pennsalt's 105-year history, and with twenty-one years' service prior to assuming office, will have longer company experience than all but one of his thirteen predecessors.

Mr. Drake went to Pennsalt as a summer trainee while still an undergraduate

—Continued on page 70

## Nat'l Lead Sets Up English Chemicals Producing Firm

National Lead Company, New York, last week formed Abbey Chemicals, Ltd., in London, England. The new firm, whose plant in Stratford is expected to start up operations by January 1, will produce and market a line of stabilizers and plasticizers for vinyl plastics, "Bentone" gelling agents and pigments and other chemicals for the paint industry.

National Lead's subsidiary, Hoyt Metal Company of Great Britain, Ltd., owns the majority interest in Abbey Chemicals, with F. W. Berk & Co., holding the remaining shares. The sale of chemical products in continental Europe will be handled through National Lead's subsidiary, Titan Company A/S.

# US Elastomers Production Declined Last Year as Did Rubber Chemicals

US production of elastomers (synthetic rubbers) declined last year along with 1954 output of rubber-processing chemicals, according to preliminary statistics released by the Tariff Commission.

The total output of all types of synthetic elastomers last year amounted to 1,435,000,000 pounds, a decrease of 27 percent from the 1,958,000,000 pounds reported for 1953. US production of rubber chemicals in 1954 was 129,000,000 pounds, a falling-off of 11 percent from the 145,000,000 pounds turned out in 1953.

Elastomer sales in 1954 were 1,497,000,000 pounds, valued at $436,000,000, compared with 1,909,000,000 pounds, valued at $529,000,000, in the previous year. Rubber chemical sales last year totaled 101,000,000 pounds, valued at $62,000,000, compared with 103,000,000 pounds, valued at $60,000,000, in 1953. Lower production and sales of rubber-processing chemicals in 1954 were attributed to a decrease in the consumption of rubber.

**Production of Cyclic Elastomers**

The production of cyclic elastomers in 1954, consisting almost entirely of the polybutadiene-styrene (GR-S or Buna S) type amounted to 973,000,000 pounds, a decrease of 31 percent from the previous year's total. This type of rubber was produced in 1954 almost exclusively in government-owned plants. Sales of S-type rubber in 1954 were 1,029,000,000 pounds, valued at $242,000,000, compared with 1,387,000,000 pounds, valued at $319,000,000, in 1953.

Production of acyclic elastomers, consisting of neoprene, butyl, silicone, isobutylene, vinyl, and other types, totaled 462,000,000 pounds, or 15 percent less than the 543,000,000 pounds reported for 1953. Sales in 1954 were 468,000,000 pounds, valued at $194,000,000, compared with 522,000,000 pounds, valued at $210,000,000, in 1953. Of the acyclic elastomers, neoprene was produced in the largest volume, 155,000,000 pounds, followed by butyl and vinyl elastomers (130,000,000 pounds and 105,000,000 pounds, respectively).

**Cyclic Rubber Chemicals**

The output in 1954 of cyclic rubber-processing chemicals totaled 110,000,000 pounds, compared with 122,000,000 pounds in 1953. Sales of these compounds in 1954 were 85,000,000 pounds, valued at $51,000,000, compared with 85,000,000 pounds, valued at $48,000,000, in the previous year. Cyclic rubber-processing chemicals are chiefly accelerators and antioxidants.

The production in 1954 of acyclic rubber-processing chemicals, chiefly accelerators and peptizers, was 19,000,000 pounds, compared with 23,000,000 pounds produced in 1953. Sales in 1954 totaled 16,000,000 pounds, valued at $12,000,000, compared with 18,000,000 pounds, valued at $12,000,000, in 1953.

# Chemical Mergers Laid To Growth and Capital

The wave of mergers in the chemical industry stems from rapid growth and a squeeze on working capital, according to a special study released last week by Commercial Discount Corporation, Chicago.

Its findings, the concern said, were based on a survey of twenty-nine medium-sized chemical manufacturers in New York, Massachusetts, Illinois, Georgia and Louisiana. These twenty-nine firms—active in pharmaceuticals, agricultural chemicals, synthetic fibers, petrochemicals and antibiotics—did a combined volume of $53,000,000 in 1954.

Noting that the chemical industry ranked third in the number of mergers from 1948 to 1954, with seventy-three, the report termed this situation "unfortunate for the economy generally." In many parts of the chemical field, it contended, the smaller firms provide flexibility and market abilities, which qualities, it added, "are not characteristic of the larger companies as a rule."

**Setting Mergers Into Motion**

The merger mechanism is set into motion, the study showed, when there is too great a squeeze on working capital. "Smaller and medium-sized companies feel they can relieve the pressure by becoming part of a larger situation," it was indicated, "and their financial headaches are then passed on to a larger company which can raise public money more easily."

This great need for working capital, in Commercial Discount's view, is not particularly surprising, since it usually happens to growth industries. It was pointed out that chemical concerns invest between $20,000 and $30,000 in plant equipment for every worker, with the figure running three or four times higher in highly mechanized installations. The national average, it was noted, is $12,000 investment per worker for industry generally.

The twenty-nine reporting firms readily acknowledged the contributions made by the chemical giants in technical know-how and research. It was also pointed out that because large facilities are needed, most of the basic chemicals are produced by the larger companies who have access to public financing.

**Role of Smaller Companies Cited**

"But while the big companies produce these basic stuffs," the report continued, "it is the small or medium-sized company whch usually does the production of the end-items which reach the consumer. The small and medium-sized companies are the ones which usually take a basic development after it becomes a potentially marketable item—and then market it.

"They are the companies which work with distributors and dealers in the chan-

—Continued on page 70

## 1-Tryptophane Being Made Now by Sheffield Chemical

Sheffield Chemical Company, Norwich, N. Y., a division of National Dairy Products Corporation, has announced that it is making and selling a purified l-tryptophane. According to J. G. Brereton, president of Sheffield, the manufacturing process involves isolation of l-tryptophane from protein hydrosylates. It is based on a patent under which Sheffield holds an exclusive license from Food Chemical & Research Laboratories, Inc., Seattle, Wash., developer of the process.

Sheffield is producing l-tryptophane at its Oneonta, N. Y., plant in a pilot unit having a capacity of twelve kilograms per week. This production will make the l-, or naturally occurring form, of this amino acid available in much greater quantities than in the past. The product is being sold in units of one kilogram. The primary outlet is to laboratories for nutritional and biochemical studies.

## Diamond Chromic Acid Plant At Painesville Now Operating

Diamond Alkali Company, Cleveland, Ohio, last week started up operations at its new chromic acid plant at Painesville, Ohio, reputedly the first completely integrated facility of its kind in the midwest. Completion of this expansion project now gives Diamond two completely integrated chromic acid installations, the other being located at Kearny, N. J.

## Calumet Fills Purchase Post

Walter A. Barz has been appointed purchasing manager of the Calumet Division of Calumet & Hecla, Inc., Calumet, Mich. Mr. Barz succeeds L. H. Donald, who retired June 1 after forty years with the firm.

*Introducing*

# 3 NEW ALKATERGES

compare these
new versatile

## SURFACE-ACTIVE AGENTS

**Compare the physical properties of these new additions to the CSC family.**

| Physical Properties | Alkaterge C | Alkaterge A | Alkaterge E | Alkaterge T |
|---|---|---|---|---|
| Color, Gardner (1933) | 15 | 7 | 7 | 7 |
| Solidification Point, °C. | −40 | −41 | −50 | 59 |
| Specific Gravity @ 20/20°C. | — | 0.885 | 0.926 | — |
| Specific Gravity @ 25/25°C. | 0.925 | 0.883 | 0.924 | — |
| Wt. per US Gallon @ 68°F, lbs. | 7.71 | 7.37 | 7.72 | — |
| Coefficient of Expansion, per 1°F. | 0.00067 | 0.00061 | 0.0043 | — |
| Refractive Index, $n_D$ @ 25°C. | — | 1.4631 | 1.4738 | — |
| Viscosity: | | | | |
| Saybolt Universal @ 100°F. sec. | — | 79.9 | 299 | — |
| Centistokes @ 100°F. | 71* | 14.5 | 62 | — |
| Interfacial Tension Against Water, dynes/cm: | | | | |
| 0.1% solution in mineral oil | 2 | 24.6 | 18.1 | 1.8 |
| 1% in m.o. against sat. ag. sol'n. | — | 10.5 | 3.7 | — |
| Surface Tension, sat. ag. sol'n. dynes/cm: | 42 | 37.6 | 37.8 | 30.4 |
| Flash Point, Cleveland Open Cup, °F. | 400 | 325 | 395 | None |
| Solubility, ml/100 ml: | | | | |
| In Water | 0.005 | 0.005 | 0.4 | 0.01 |
| Water in product | — | 3.8 | 2.56 | — |

*at 96°F

Now, Commercial Solvents offers three new surface-active agents that are closely related to ALKATERGE-C. Because of the latter's proven industrial usefulness, demand exceeds supply. Production facilities are being expanded and more will be available starting August 1955. Meanwhile, many of CSC's customers have found that ALKATERGE-A, -E, or -T do equally well or better in many of the jobs formerly accomplished by ALKATERGE-C. While they differ somewhat in individual properties, they should prove useful as auxiliary emulsification agents, antifoam agents, dispersing agents, spreading agents, pigment-grinding assistants, acid acceptors and in numerous other applications. Test all or any of these three new alkaterges for yourself. For complete information and a sample, write to Market Development Department, CSC, 260 Madison Ave., N.Y. 16, N.Y.

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CSC INDUSTRIAL CHEMICALS

## *Association Meetings*

**This Week**

Del-Mar-Va Peninsula Fertilizer Association, George Washington hotel, Ocean City, Md., June 25.

Drug, Chemical and Allied Trades section of the New York Board of Trade, luncheon meeting, Waldorf-Astoria hotel, New York, June 22.

Forest Products Research Society, national meeting, Olympic hotel, Seattle, Wash., June 20-23.

American Association of Textile Chemists and Colorists, Atlantic City, N. J., September 22-25.

American Council of Independent Laboratories, annual meeting, Westward Ho hotel, Phoenix, Ariz., November 8-11.

American Institute of Chemical Engineers, Lake Placid, N. Y., September 25-28; annual meeting, Statler hotel, Detroit, Mich., November 27-30.

American Petroleum Institute, annual meeting, St. Francis, Fairmount, Palace and Mark Hopkins hotels, San Francisco, November 14-17.

American Pharmaceutical Manufacturers Association, mid-year meeting, Waldorf-Astoria hotel, New York, December 12-14.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 26-July 1.

American Soybean Association, National Soybean Processors Association, joint meeting, Netherlands Plaza hotel, Cincinnati, Ohio, August 29-31.

Association of Consulting Chemists and Chemical Engineers, forum and annual meeting, Belmont Plaza hotel, New York, October 25.

Atomic Industry Trade Fair, Sheraton-Park hotel, Washington, D. C., September 26-30.

Chemical Market Research Association, Cavalier hotel, Virginia Beach, Va., September 22-23; joint meeting with CCDA, Carter hotel, Cleveland, Ohio, November 14-15.

Combined Pharmaceutical Contact Committee of ADMA and APMA, Sheraton-Park hotel, Washington, D. C., October 10-11.

Commercial Chemical Development Association, joint meeting with CMRA, Carter hotel, Cleveland, Ohio, November 14-15.

Drug, Chemical and Allied Trades section of the New York Board of Trade, annual meeting, Pocono Inn, Pocono Manor, Pa., September 22-24.

Exposition of Chemical Industries, Commercial Museum and Convention Hall, Philadelphia, December 5-9.

Federation of Paint and Varnish Production Clubs, annual meeting, Statler hotel, New York, October 3-5.

Federal Wholesale Druggists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., September 11-14.

National Agricultural Chemicals Association, annual meeting, Essex and Sussex hotel, Spring Lake, N. J., September 7-9.

National Association of Retail Druggists, annual convention, Atlantic City, N. J., October 16-20.

National Chemical Exposition, Public Auditorium, Cleveland, Ohio, November 27-30.

National Foreign Trade Council, annual foreign trade convention, Waldorf-Astoria hotel, New York, November 14-16.

National Paint, Varnish and Lacquer Association, annual convention, Shoreham and Sheraton-Park hotels, Washington, D. C., October 31-November 2.

National Petroleum Association, annual meeting, Traymore hotel, Atlantic City, September 14-16.

National Soybean Processors Association, American Soybean Association, joint meeting, Netherlands Plaza hotel, Cincinnati, Ohio, August 29-31.

Packaging Machinery Manufacturers Institute, annual meeting, The Homestead, Hot Springs, Va., September 15-18.

Paint Industries' Show, Statler hotel, New York, October 3-5.

Parenteral Drug Association, annual meeting, New Yorker hotel, New York, October 25-27.

Society of the Chemical Industry, annual meeting, University of Birmingham, Birmingham, England, July 11-16.

Synthetic Organic Chemical Manufacturers Association, annual dinner, Commodore hotel, New York, December 1.

World Plastics Fair and Trade Exposition, National Guard Armory, Los Angeles, October 5-9.

## Sen. Sparkman Will Address N. Y. Trade Board Luncheon

Sen. John J. Sparkman of Alabama, former vice-presidential candidate and currently a member of the senate foreign relations and the banking and currency committees, will speak on "America's Future in International Trade" before a joint luncheon meeting of the International Trade and Transportation sections of the New York Board of Trade June 29 at the Commodore hotel, New York.

The luncheon will also honor Albert J. Bernaud, who is retiring as executive secretary of the International Trade section of the New York Board of Trade on June 30. Mr. Barnaud has been associated with the Board of Trade since 1944 and is celebrating his fifty-second year in the foreign trade field.

## Argentina Won't Attain Tung Oil Record Again

Argentine production of 1955-crop tung oil is likely to amount to no more than 12,800 short tons, according to a report prepared by V. H. Hougen, commodity specialist of the Foreign Agricultural Service. Mr. Hougen was also doubtful that Argentine output will ever again reach its past heights.

The production estimate from the 1955 crop is one-fourth less oil than produced from the 1954 crop and about one-third below the 1953 record of 20,500 tons. It is possible, he said, that the current estimate is a maximum, and actual oil production will be from 10,000 to 12,000 tons. Crushing of the 1955 crop is expected to begin in November.

**1953 Levels Seen Unlikely Again**

Mr. Hougen said that it appears unlikely that Argentina will again produce a tung nut crop comparable to that of 1953 because profits have been insufficient to induce producers to continue to care for the tung plantations. Moreover, no new plantings or replantings have been made in recent years. This has happened in spite of the fact that the price to producers for tung nuts delivered at the oil mills has increased from 375 pesos per metric ton for the 1950-51 crop to 650 pesos for the 1954-55 crop.

In many parts of the producing area, he added, tea and yerba mate have been, and are being, interplanted with tung trees. It is expected that as these plantings come to maturity the older tung trees will be destroyed in favor of the new crops. These are the reasons for the likelihood of reduced tung production in the years to come.

In late May of this year, apparent stocks of tung oil totaled 4,900 tons. Of this amount, about 1,100 tons were from the 1953 crop. Expectations are that all nuts from last year's harvest will be crushed

—*Continued on page 70*

## Oil Chemists' Group Slates Analytical Course Aug. 1-5

The American Oil Chemists' Society has announced the roster of speakers for its short course on analytical technics, to be held at the University of Illinois, Urbana, Ill., from August 1 through 5. The morning of August 1 will include a talk on sampling by L. R. Brown of A. E. Staley Manufacturing Company, Decatur, Ill., and one on "Determination of Impurities," by A. A. Rodeghier of Durkee Famous Foods, Chicago.

"Loss Determinations," will be discussed by E. M. James, a consultant from Swarthmore, Pa., on the afternoon of August 1. Following him will be R. C. Stillman of Procter and Gamble Company, Cincinnati, Ohio, who will cover "Color and Bleach Methods," and H. M. Smith, of Southern Cotton Oil Company, Chicago, who will discuss "Melting, Solidification and Consistency."

Talks on August 2 will begin with "Flavor Evaluation," by C. D. Evans of Northern Regional Research Laboratory, Peoria, Ill. "Stability and Rancidity," by Le Roy Dugan, jr., of the American Meat Institute Foundation, Chicago, will follow. "Performance Testing," by Emery C. Swanson of Pillsbury Mills, Springfield, Ill., will concude the morning session.

A lecture on "X-Ray Spectroscopy," by W. S. Singleton of Southern Regional Re-

—*Continued on page 38*

## *Mexican Gulf Sulphur V.P.*

Fraser M. Moffat, jr., has been elected a vice-president of Mexican Gulf Sulphur Company, New York. Mr. Moffat was formerly director of the dyes and chemicals export department of American Cyanamid Company. He had also been vice-president of U. S. Industrial Chemicals, Inc., and a manufacturing and sales executive of National Aniline & Chemical Company.

## ASTM Session Next Week To Feature 7 Symposiums

Seven symposiums will feature the fifty-eighth annual meeting of the American Society for Testing Materials, to be held at the Chalfonte-Haddon Hall hotel, Atlantic City, N. J., June 26 through July 1.

The following topics will be discussed at the symposiums:—Impact testing, judgment factors in soil testing, significance of tests of concrete, high purity water corrosion, speed of testing of non-metallic materials, atmospheric corrosion of nonferrous metals, and metallic materials for service at temperatures above 1,600 degrees Fahrenheit. Other sessions will be held on the subjects of testing, non-ferrous metals, steel, concrete, pyrometry and fatigue.

Dr. Walter J. Hamburger, director of Fabric Research Laboratories, Inc., will deliver the twenty-ninth annual Edgar Marburg Lecture, on June 29. The title will be, "A Technology for the Analysis, Design and Use of Textile Structures as Engineering Materials." The lecture will trace the chronology of textile craftsmanship during the prehistoric era, early civilization, the industrial revolution and especially during the development of mod-

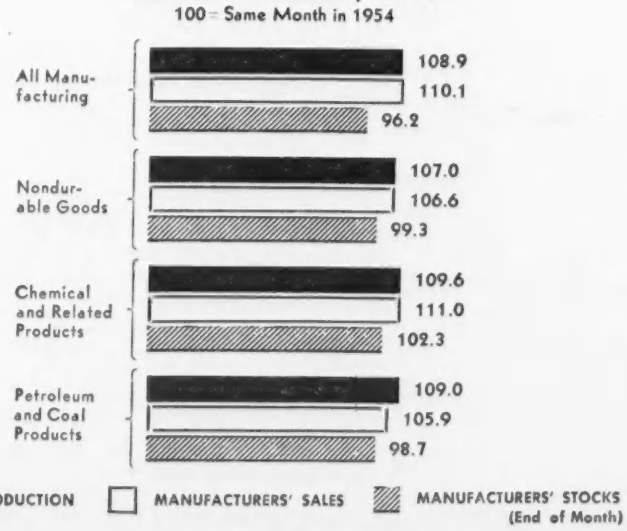
—*Continued on page 53*

## Canadian Toilet Goods Ass'n Makes Williams Its President

E. A. Williams, vice-president and general manager of Ponds Extract Company of Canada, Toronto, a subsidiary of Ponds Extract Company, New York, has been elected president of the Canadian Toilet Goods Manufacturers Association. Other officers named are:—First vice-president, Andre Ligne of Coty Canada, Montreal; second vice-president, Reg Fairbanks of Fairbanks Soap Company; and third vice-president, Gordon Savage of J. B. Williams Canada, Montreal.

## Business in March, 1955

100 = Same Month in 1954




## Plant Food Inst. Elects Howell as Its President

The National Plant Food Institute at its preliminary convention at White Sulphur Springs, W. Va., last week elected J. A. Howell president. The new organization, which officially comes into being on July 1, is the outgrowth of a merger of the National Fertilizer Association and the American Plant Food Council.

Mr. Howell, who will take office on the first along with other institute officers, is

J. A. Howell

president of Virginia-Carolina Chemical Corporation, Richmond Va. E. A. Geohegan, vice-president of the Southern Cotton Oil Company, New Orleans, La., will be board chairman of the institute.

The organization will have two executive vice-presidents. They are Dr. Russell Coleman, currently president of the NFA, and Paul F. Truitt, president of APFC. W. R. Allstetter, an NFA vice-president, will serve in a similar capacity with the institute. Louis H. Wilson, director of information for APFC, will be secretary of the institute. W. S. Ritnour will be treasurer.

Rep. Harold D. Cooley, chairman of the house committee on agriculture, charged that there's a deliberate campaign afoot to get the nation's consumers to rise up against the American farmer. It is, he contended, part of a drive to destroy the

—*Continued on page 70*

## Int'l Chemistry Congress Planning to Meet in Zurich

The International Congress of Pure and Applied Chemistry has announced the program for its meeting to be held in Zurich, Switzerland, from July 21 through 27. The first of five congress lectures will be given by Prof. V. Du Vigneaud of Cornell University on "Oxytocin, the Principal Oxy-Tocic of the Posterior Pituitary Gland: Isolation, Structure and Synthesis."

The other four congress lectures will be given by:—Prof. C. Dufraisse of the College de France, Paris, on "La Photooxydation"; Prof. N. A. Nesmejanow of the Academie des Sciences, Moscow, on "Zweifache Reaktionsfaehigkeit und Tautomerie"; Prof. C. K. Ingold of the University College of London, on "Developments in the Theory of Steric Hindrance"; and Prof. K. Alder of the Univeritat Korn, on "Neuere Entwicklung der Dien-Synthese."

First of two section lectures on theoretical and physical organic chemistry will

—*Continued on page 54*

## Spain Gets Authorization To Buy US Cottonseed Oil

A purchase authorization was issued to the Government of Spain by the Department of Agriculture last week to finance the purchase from United States suppliers of up to $5,000,000 worth of cottonseed oil. The authorization was issued under an agreement announced April 21 entered into under the agricultural trade development and assistance act of 1954.

Sales contracts between suppliers and importers may be made through August 31. Delivery to importers may be made not later than September 30, 1955. The cottonseed oil exported must have been produced in the continental United States.

## Parenteral Drug Meeting Set

The Parenteral Drug Association has announced that it will hold its annual meeting October 25 through 27 at the New Yorker hotel, New York. The meeting will be open to members and non-members.

Roche has 13 popular types of Vitamin A for the pharmaceutical industry!

Both liquid and dry forms of 'Roche' Vitamin A were developed with your manufacturing problems in mind. Vitamin A 'Roche' has 6 big advantages:

• Stability • Availability
• Quality • High Potency
• Economy • Palatability
• Uniformity • No "Fishy Burp"

Call Roche for vitamin A. Vitamin Division, Hoffmann-La Roche Inc., Nutley 10, N. J. NUtley 2-5000

Sodium sesquisilicate, hydrated, bgs., c.l., works.....100 lbs. 4.60 • —
l.c.l., works.....100 lbs. 4.95 • 5.35
dms., c.l., works.....100 lbs 5.00 • —
l.c.l., works.....100 lbs. 5.35 • 5.75

Sales zones are: (1) All States E. of Miss. R. and N. of south bound. of Ky. and

Stannous chloride, anhyd., dms., works lb. .805 • 1.074
Hydrous (crystals), dms., works, works lb. .76 • .77
Sulfate, dms., works ..... lb. .924 • .944

Starch, corn, pea:

c.l., works...ton.18.40 • —
l.c.l., works.....ton.26.00 • —
fibrous, New York, grd., bgs.,

Starch, corn, pea:
Corn, Ohio.....gal. .32 • —
Middletown, Ohio....gal. .33½ • —
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Sodium cinchopn
Sodium-formalde
Sodium-zirconyl
1,000-lb lots
smaller
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petroleum (s
aromatic)
Sorbitan monostea
000-lb. l
10,000 to 20
smaller lots
Tristearate, fib.
10,000 to 20
smaller lots
Sorbitol, cryst., p
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powd., dms., 1
soln., coml., aqu
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smaller lo
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reg., 70%, aqu
ton lots
smaller
tanks, wor
Soybean meal, 44%
protein, chemically
mechanically re
works lb. .06 • —
Sparteine sulfate, cus.....oz. .80 • .85
Spearmint leaves, dom., bls ..... lb. .75 • —
imp., bls ..... lb. 1.25 • —
Spruce, extract, liq., reg. tanks, works lb. .01¾ • —
powd., super. bgs., c.l., works, lb. .05¼ • —
l.c.l. works ..... lb. .05½ • —
Squill, white, bls .....lb. .17 • .19
powd., fibs. bxs ..... lb. .18 • .21
St. John's bread, edible, bls lb. .13 • .15
Stannic chloride, anhyd., dms., works..lb. .732 • .762
Oxide, dms., dlvd. E.....lb. .93½ • .94½

ground, bgs., ex-dock....ton.127.00 • —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto., unit-ton. .88 • .91
Carteret, N. J unit-ton. .88 • .91
triple, 48% or more, a.p.a., pulv., bulk, c.l., East Tampa, Fla, unit-ton. .98 • —

T

2,4,5-T, dms., c.l., works, frt. equald, lb. 1.25 • —
l.c.l., same basis ..... lb. 1.30 • 2.30
Isopropyl, ester, dms., c.l., works, frt. equald. lb. 1.30 • —
l.c.l., works.....lb. 1.35 • —

solid, dms., frt. alld.....lb. .61 • —
m-Toluidine, dms., c.l., works, frt, alld. lb. .79 • —
l.c.l., same basis.....lb. .80 • —
tanks, same basis.....lb. .78 • —
o-Toluidine, dms., c.l., works, frt, alld. lb. .23 • —
l.c.l., same basis.....lb. .24 • —
tanks, same basis.....lb. .22 • —
p-Toluidine, flake, dms., frt. alld. lb. .64 • —
solid, dms., frt. alld. .....lb. .60 • .61
Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa. ..... gal. .34 • —
Birmingham dist.....gal. .32 • —
Chicago dist .....gal. .35 • —
Cleveland dist.....gal. .32 • —
Geneva, Utah ..... gal. .26 • —
Johnstown, Pa. .....gal. .32 • —
Lackawanna, N. Y.....gal. .35 • —

V

Vitamin A acetate, syn., crystalline, beads, 500,000 A units per gram, gram. .07¼ • —
dry, 500,000 units per gram, kilo lots, kilo.72.50 • —
325,000 units per gram, same basis, kilo47.10 • —
250,000 units per gram, same basis, kilo.36.25 • —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram, 1,000,000 units, .12 • —
Palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units. .12 • —
in oil, 1,000,000 A units per gram, 1,000,000 units. .12 • —

# Current Market Quotations

## Chemicals and Related Materials

All matters under this heading fully protected by copyright.

**Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, June 17 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.**

## A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms. works lb. .40 - —
above 92.5 C., m.p., bbls., dms., works lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., dlvd. lb. .12 - —
l.c.l., dlvd lb. .13½ - —
tanks, dlvd lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., bbls. c.l., dlvd. lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .30½ - —
USP bbls., 2,000-lb lots lb. .80 - —
smaller lots lb. .81 - .86
Acetic anhydride, dms. c.l. dlvd E. lb. .15½ - —
l.c.l., dlvd E lb. .17 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib., dms., c.l., dlvd lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .09 - —
l.c.l., dlvd. lb. .10 - —
tanks, dlvd. lb. .07 - —
Methyl (see M)
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 - 1.19
Acetophenone cns., dms lb 1.21 - 1.35
tech., dms., l.c.l., works lb. .75 - —
N Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt. alld E. of Denver. lb. .40 - —
tanks, frt. alld. E. of Denver. lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490 - —
cryst., dms. c.l., works lb. .06½ - —
l.c.l. works lb. .07 - .07½
Acetic, coml., or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls 100 lbs 8.25 - —
70%, bbls 100 lbs. 9.95 - —
80% bbls 100 lbs. 10.45 - —
glacial, syn., CP, dms., dlvd. 100 lbs. 15.00 - 16.00
tech., dms., c.l., dlvd 100 lbs. 12.00 - —
l.c.l., same basis 100 lbs. 13.00 - —
tanks, dlvd 100 lbs. 10 00 - —
USP cbys., inclusive, dlvd., 100 lbs. 24.00 - 25.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (80 mesh), bbls., 1,000-lb. lots. lb. 58 - .60

Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.

Adipic, fib, dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37¼ - —
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75
p-Aminobenzoic, tech., dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.50 - —
smaller lots, works lb. 2.55 - 2.60
p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.00 - —
smaller lots, same basis lb. 4.05 - 4.50
Anthranilic, bbls., frt. equald lb 1.21 - —
Arsenous, tech., (see Arsenic, white).
USP (see Arsenic trioxide).
Ascorbic USP, dms., 25-100 kilo lots kilo. 16.00 - —
10-kilo lots kilo. 16 35 - —
5-kilo lots kilo. 16.75 - —
bots 1-kilo lots kilo. 17.00 - —
500-gram lots kilo. 17.50 - —
Battery, cbys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45
Benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms., 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton. 124.25 - —
ton lots, ex whse, N. Y. or Chi ton. 172.00 - —
smaller lots, same basis. ton. 177.00 - —
bbls., c.l., works ton. 148.75 - —
ton lots, ex whse. N. Y. or Chi ton. 196.50 - —
smaller lots, same basis. ton. 201.50 - —
gran., bgs., c.l., works ton. 99.25 - —
ton lots, ex whse. N. Y. or Chi ton. 147.00 - —
smaller lots, same basis. ton. 152.00 - —
bbls., c.l., works ton. 123.75 - —
ton lots, ex whse. N. Y. or Chi ton. 171.50 - —
Acid, boric, tech., 99.9%, gran., bbls., smaller lots, same basis. ton. 176.50 - —
bulk, c.l., works ton. 94.25 - —
powd., bgs., c.l., works ton. 104.25 - —
ton lots, ex whse, N. Y. or Chi ton. 152.00 - —
smaller lots, same basis. ton. 157.00 - —
bbls., c.l., works ton. 128 75 - —
ton lots, ex whse., N. Y or Chi ton. 176.50 - —
smaller lots, same basis. ton. 181 50 - —

Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric Acid $25 per ton higher.

Broenners bbls lb. 1.76 - —
Butyric, 99% dms., c.l., works, lb. .34 - —
c.l., works lb. .34½ - —
tanks, works lb. .32½ - —
Capric, dms lb. .24 - .26
Caprylic, dms. lb. .24 - .26
Cassella, dms., frt. alld., 100% basis lb. 1.44 1.75
Castor oil, split, dms lb. .35½ .36
Chicago bbls frt alld lb. 3.21 - —
Chloroacetic, mono-, purif., flake, 99%, dms lb. .23½ - .25½
tech., flake 96-97%, frt. equald dms lb. .20 - .21
o-Chlorobenzoic, fib dms., works lb. 1.13 - —
p-Chlorobenzoic, fib dms., works lb. 1.59 - 1.62
Chlorosulfonic, dms., c.l., frt. equald lb. .0465 - —
l.c.l., frt. equald lb. .0515 - —
tanks, frt. equald lb. .0415 - —

Acid, chlorosulfonic, in stainless steel dms. ½c. per lb higher.

Cholic, 100-lb. lots, fib. dms. lb. 6.00 6.25
Chromic 99¾%, dms. c.l. works frt. equald lb. .27½ - —
l.c.l., dlvd., N. Y. metropolitan area lb. 28¼ - .29¼

NF (see Chromium trioxide).

Cinnamic, refd. bots lb. 2.50 3.50
Citric, USP, anhyd., gran., fine gran dms., c.l lb. .28¾ - —
10,000-lb lots, 1 shipt. lb. .29¼ - —
smaller lots lb. .29¾ - .31¼
Acid, citric, USP, hydrous, gran., fine gran., dms., c.l lb. .27 - —
10,000-lb lots, 1 shipt. lb 27½ - —
smaller lots lb. 28 - .29½
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. .79 - —
Coconut oil, dist., dms lb. .24¾ - .26¾
tanks lb. .22¾ - —
dbl. dist., dms lb. .25¾ - .27¾
tanks lb. .22¾ - .23¾
Corn oil, dist., dms lb. .15¾ - .17¾
tanks lb. .13¾ - —
Cottonseed oil, dist., dms lb. .1525 - .1725
tanks lb. .1325 - —
2,3-Cresotic, dms. ton lots, works. lb. .66 - —
less than ton lots lb. .68 - —
Cresylic, coaltar, dom. 50% 207 C or above, resin and tricresyl phosphate grade, tanks, frt. equald gal. 1.00 - —
50% 210° C. or above, total range over 9° C., non-resin grade, dms., c.l., same basis gal. .91 - —
l.c.l., same basis gal. .94 - —
tanks, same basis gal. .80 - —
50% 204° to 207° C., tricresyl phosphate and resin grade, tanks, same basis gal. 1.10 - —
imp., 75% at 215° C., or over, dms, ex whse gal. .75 - .90
petroleum, dom., 195° to 214°C., non-ret. 65 dms. to c.l., works, San Francisco and Los Angeles gal. .75 - —
l.c.l., same basis gal. .77 - 79
tanks, works, frt. alld. E. gal. .71 - —
200° C to 222° C., tanks, Wilmington, Cal gal. .62 - .69
211° C to 237° C., non-ret. dms. c.l., San Francisco and Los Angeles gal. .67 - —
l.c.l., same basis gal. .69 - .71
tanks, same basis gal. .54 - —
220° C. to 242° C., tanks, Wilmington, Cal gal. .54 - .59
245° C. to 298° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic fib. dms., 200 lbs. or more, works lb. .50 - —
Cyanoacetic, tech., bbls lb. .90 1.25
Dehydrocholic, injection, fib dms. 100-lb. lots lb. 12.25 - —
oral, fib. dms., 100-lb. lots lb. 9.25 - —
Acid, desoxycholic, fib. dms., 100-lb. lots lb. 14.00 - —
Dichlorophenoxyacetic (see under D 2,4-D)
Diethylbarbituric (see Barbital)
Diglycolic bgs works lb. .14 - —
2-ethyl hexoic, dms., c.l., works lb. .36½ - —
l.c.l., works lb. .37½ - —
tanks works lb. .34½ - —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots fib cns kilo-lots or more gram. 1.40 - —
Formic, 85%, cbys., c.l., works lb. .1570 - —
l.c.l., works lb. .1620 - .1720
90%, cbys. c.l., works lb. .1625 - —
l.c.l. works lb. .1675 - 1775
Fumaric, tech., bgs., dms lb. .27 - .29
Gallic, NF VII bbls. 1,000-lb. lots lb. 1 80 - —
smaller lots lb. 1.82 - 2.00
tech., bbls., 1,000-lb. lots lb. 1.58 - —
smaller lots lb. 1.69 - 1.78
Gamma, dry, grd. bbls., frt. alld. lb. 1.50 - —
paste bbls frt alld lb 1.45 - —
Gentisic, 100-lb fib dms lb 8.50 - —
Gluconic, tech., 50% bots lb. .25 - .35
cbys. lb. .19 - —
dms. lb. .15½ - —
l-Glutamic, 99½% fib. dms., 100 lb lots works lb 2.45 - 2.53
25 lb lots, works lb 2.54 - 2.60
Glycerophosphoric, 35%, dms., works lb. 2.25 - 2.35
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., works, 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., cbys lb 2.94 - —
1.70 s.g., cbys lb. 3.23 - —
Hydrobromic, medicinal, 48%, cbys dlvd E lb .37 - .43
Hydrochloric, anhyd (see Hydrogen chloride).
18° cbys., c.l., works 100 lbs. 2.50 - —
l.c.l., dlvd Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt equald ton. 28.00 - —
20° cbys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd Metropolitan area 100 lbs. 3.15 - —
tanks works, frt equald ton. 30.00 - —
22° cbys., c.l., works 100 lbs. 3.25 - —
l.c.l. dlvd Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton. 35.00 - —
CP, USP, consumers, cbys., extra c.l works lb. .11¾ - —
l.c.l., same basis lb. .13¼ - .133¼
5-pint bots., extra, cs., c.l., same basis lb. .16¾ - —
l.c.l., same basis lb. .18¼ - .19½

Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb less.

Hydrocyanic, cyls. frt alld lb. .75 - 95
dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
tanks, works lb. .21 - —
70%, steel dms., works lb. .18½ - .22½
Hydrofluosilicic, basis 30%, dms., works lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W. Va., 100% basis lb. .095 - —
Hypophosphorus, purif., 50%, cbys lb. 1.30 - 1.32
USP, cbys lb. .88 - —
Isonicotinic, 100 lb fib dms, works lb. 5.00 - —
Itaconic, fib dms., c.l., works lb. .59 - —
l.c.l., works lb. .60 - —

Hydrazide (see Isoniazid).

J, bbls., works, 100% basis lb. 2.50 - 2.85
Koch, bbls., frt. alld lb. .64 - .70
L, bbls., works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1754 - .215
smaller lots lb. .1854 - .225
80%, bbls., 5 or more lb. .3054 - .37
smaller lots lb. .3104 - .375
plastic grade 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22%, bbls., c.l., works 100 lbs. 6.30 - —
l.c.l., works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 - 11.95
l.c.l., works 100 lbs. 11.85 - 12 35
USP, 85%, cbys. lb. .85 - .88
Laurent's, bbls lb. .60 - —
Lauric, dms lb. .35½ - .37½
Linseed oil, dist., dms lb. .1895 - —
w.w., dms lb. .2195 - —
Maleic, cryst., powd., dms lb. .37 - .38
Malic, tech., dms lb. .60 - —
Mandelic, NF, dms., 1,000-lb. lots. lb. 2.35 - —
smaller lots lb. 2.40 - 2.50
Metanilic, dms., works lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½ - —
smaller lots, works lb. .55 - —
Molybdic, 85-92%, dms., works lb. 1.32 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .28 - 29¾
1-Naphthol-4-sulfonic (see Acid, Nevile and Winthers).
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic, 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic, 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic, 2-amino (see Acid, J).
Naphtholsulfonic, mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2-Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid, Tobias).



## *Abbreviations*

### *Used in OPD Market Quotations*

| | | | | | |
|---|---|---|---|---|---|
| alld. | allowed | distr. | distributor | NNR | New and Nonofficial Remedies |
| amorph. | amorphous | djns. | demijohns | No. | number |
| AMP | American melting point | dlvd. | delivered | nom. | nominal |
| anhyd. | anhydrous | dms. | drums | o- | ortho |
| a.p.a. | available phosphoric acid | dom. | domestic | ord. | ordinary |
| approx. | approximately | E. | east | oz. | ounce |
| artif. | artificial | e.p. | end point | p- | para |
| ASTM | American Society for Testing Materials | equald. | equalized | Pac. | Pacific |
| Atl. | Atlantic | exp. | expressed | pf. | proof |
| Be. | Baume | F. | fahrenheit | phos. | phosphate |
| bbls. | barrels | ferment. | fermentation | photo. | photographic |
| bgs. | bags | f.f.a. | free fatty acid | pkgs. | packages |
| bls. | bales | f.f.c. | free from chlorine | powd. | powdered |
| bots. | bottles | fib. | fiber | precip. | precipitated |
| b.p. | boiling point | f.o.b. | free on board | prod. | producer |
| b.p.l. | bone phosphate of lime | f.p.a. | free of prussic acid | pt. | point |
| b.r. | boiling range | frt. | freight | pulv. | pulverized |
| bxs. | boxes | gal. | gallon | purif. | purified |
| C. | centigrade | gran. | granular | redist. | redistilled |
| cbys. | carboys | grd. | ground | refd. | refined |
| CD | completely denatured | i.&a. | iron and aluminum | refy. | refinery |
| c.i.f. | cost, insurance, freight | i.b.p. | initial boiling point | reg. | regular |
| cks. | casks | imp. | imported | resub. | resublimed |
| c.l. | carlots | incl. | included | ret. | returnable |
| cns. | cans | indust. | industrial | SD | specially denatured |
| coml. | commercial | kgs. | kegs | s.d. | single distilled |
| conc. | concentrated | l- | laevo | S E. | southeast |
| CP | chemically pure | lacq. | lacquer | sec. | secondary |
| cps. | centipoises | lb. | pound | secs. | seconds |
| cryst. | crystal | l.c.l. | less than carlots | s.g. | specific gravity |
| cs. | cases | l.t.l. | less truckload | ship't | shipment |
| ctns. | cartons | liq. | liquid | soln. | solution |
| cyls. | cylinders | mfrs. | manufacturers | s.u. | standard unit |
| d- | dextro | m- | meta | syn. | synthetic |
| dbl. | double | m.a.p. | mixed aniline point | tanks. | railroad tankcars |
| denat. | denatured | min. | minimum | tech. | technical |
| dest-dist. | destructive-distilled | m.p. | melting point | tert- | tertiary |
| dl- | dextro-laevo | N- | nitrogen | t.l. | truck loads |
| dist. | distilled | n- | normal | t.w. | tank wagons |
| | | nat. | natural | USP | U. S. Pharmacopoeia |
| | | neut. | neutral | vis. | viscosity |
| | | NF | National Formulary | VM&P | varnish makers & painters |
| | | | | W. | west |
| | | | | whse. | warehouse |
| | | | | w. w. | water-white |

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

## Acid, Nevile & Winther's—Alcohol, Diacetone

Acid, Nevile and Winther's, dms., frt. alld lb. 1.20 - —
Nicotinic, USP, dms., frt. adjusted kilo 8.00 - 8.30
Amide, USP, (see Nicotinamide).
Nitric 36° Be chys., c.l., works, E. 100 lbs. 5.75 - —
l.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be chys., c.l., works, E. 100 lbs. 6.25 - —
l.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be, chys., c.l., works, E. 100 lbs. 6.75 - —
l.c.l., works, E 100 lbs. 7.05 - 7.85
42° Be chys., c.l., works, E. 100 lbs. 7.25 - —
l.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% $HNO_3$, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% $HNO_3$, tanks, works, 100% basis 100 lbs. 4.90 - —
CP NF, consumers, chys., extra c.l., works lb. .13½- —
l.c.l., same basis lb. .11¼- .11¾
5-pt. bots., extra, cs., c.l., c.l., same basis lb. .17½- —
l.c.l., same basis lb. .14¾- .20¾
p-Nitrobenzoic, dms., c.l., works lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .17½- .19½
tanks lb. .15½- —
dbl. dist. (white), dms lb. .20 - .22
tanks lb. .1800- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Cresotic).
Oxalic, bbls., c.l., works lb. .16½- —
10,000-lb. lots, works lb. .16¾- —
smaller lots, works lb. .17¾- —

Acid, b-oxynaphthoic, bbls., works, lb. 1.14 - —
Palm oil, dbl., dist., dms lb. .14¼- .16¼
Para-aminobenzoic (see Acid, p-Aminobenzoic)
Para-aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst. cns. lb 75 - 1.70
Phenylcinchoninic (see Cinchophen).
Phenylglycolic (see Acid, mandelic).
Phosphoric, food grade, 75%, cbys., c.l., frt. alld E 100 lbs. 6.50 - —
l.c.l., works 100 lbs. 7.25 - —
tanks, works 100 lbs. 5.10 - —
NF, 85%, cbys., c.l., works lb. .08 - —
l.c.l., works lb. .08½- —
Picric, NF, bbls. lb. .60 - —
tech., bbls. lb. .34 - .35
Propionic, syn., pure, dms., c.l., works lb. .21 - —
l.c.l., works lb. .22 - —
tanks, works lb. .19 - —
Pyrogallic, NF, (see Pyrogallol).
tech., bbls lb. 2.76 - 2.99
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb. 3.25 - —
Salicylic, crude, fib. dms lb. .37 - —
sublimed, tech., fib. dms., c.l. lb. .39 - —
l.c.l. lb. .46 - —
dyestuffs grade, fib. dms lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd., fib. dms lb. .53 - —
Sebacic, purif., dms., c.l., works. lb. .64 - —
l.c.l., works lb. .66 - .70

Acid, soybean oil, dbl. dist., dms lb. .17¾- .19¾
tanks lb. .15¾- —
s.d., dms lb. .16¼- .18¼
tanks lb. .14¼- —
Stearic, dbl. pressed, bgs lb. .14¼- .16¼
single pressed, bgs lb. .13¾- .15¾
triple pressed, bgs. lb. .16½- .18½
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech., dms., c.l., frt. alld lb. .19 - —
l.c.l., frt. alld lb. .21 - —
Sulfuric, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
l.c.l., works 100 lbs. 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works. 100 lbs. 2.23 - —
l.c.l., works 100 lbs. 2.55 -3.35
tanks, works ton 22.35 - —
98%, tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —
CP, NF, consumers, cbys. extra, c.l., works, frt. equald lb. .09¾- —
l.c.l., same basis lb. .11¼- .11¾
5-pt. bots., extra cs., c.l., works, frt. alld lb. .13¼- —
l.c.l., same basis lb. .14¾- .20¾
fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks, works ton 39.50 - —
Tallow, dist., dms lb. .14¼- .16¼
hydrogenated, bgs lb. .13¼- .15¼
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb. 1.80 - —
smaller lots lb. 1.81 - 1.85
powd., bbls., 1,000-lb. lots lb. 1.70 - —
smaller lots lb. 1.71 - 1.76
tech., dms lb. .95 - —

Acid, tartaric, USP, dom., 230 or 250-lb. dms., c.l. lb. .44 - —
10,000-lb. lots, 1 shipt lb. .44½- —
smaller lots lb. .45 - —
100-lb. dms lb. .46 - —
small, dms. lb. .48 - .54
imp., bgs lb. .38 Nom.
Thioglycolic, refd., cbys., 100% basis lb. 1.35 - 1.55
Tobias, bbls., frt. alld lb. .77 - —
Toluenesulfonic, dms., c.l., works, lb. .16 - —
l.c.l., works lb. .17½- —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l. lb. .90 - —
125 lbs. to t.l. lb. 1.00 - —
p-Toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots. lb. 2.50 - 2.50
Trichlorophenoxyacetic (see under T' 2,4,5T)
Tungstic, tech., kgs., works lb. 4.25 - —
Undecylenic, dms lb. 1.40 - —
Aconite root, bls lb. .50 - .55
Aconitine, cryst., potent, bots oz. 78.00 -85.00
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works lb. .47½- —
Acrylonitrile, dms., c.l., works lb. .33 - —
l.c.l., works lb. .34 - —
tanks, works lb. .21 - —
ACTH, cryst., bulk, 1,000 units/gram, bots gram 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTHD.
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.25
powdered, 30 mesh, fib., dms lb. 3.40 - 3.50
dl-Alanine, dms., works lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms., c.l. lb. .65 - .90
Egg, edible, flake, bbls lb. 1.60 - 1.64
powd., cryst., bbls lb. 1.64 - 1.68
tech., cryst., bbls lb. .70 - .85
Alcohol, allyl, dms., c.l., dlvd lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°132°c., dms., l.c.l., dlvd lb. .43 - —
ACS grade, dms., c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .17 - —
l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .15 - —
primary, dms., c.l., frt. alld. lb. .19¼- —
l.c.l., frt. alld lb. .20¼- —
tanks, frt. alld lb. .17¼- —
sec-synthetic, dms., c.l., frt. alld., works lb. .18 - —
l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
l.c.l., frt. alld. E lb. .18 - —
tanks, frt. alld. E lb. .15 - —
1-pentanol, (syn. normal), dms., c.l., works lb. .42 - —
l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n Butyl, ferment., dms., l.c., frt. alld lb. .15 - —
l.c.l., frt. alld lb. .16 - —
tanks, frt. alld lb. .13 - —
n-synthetic, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
sec-synthetic, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld lb. .15 - —
tanks, works lb. .12 - —
Capryl, 95%, dms., c.l., works lb. .21½- —
l.c.l., works lb. .22½- .23½
tanks, works lb. .19½- —
Cetyl, extra ndo., cns., 500-lb. lots or more lb. .73 - —
smaller lots lb. .80 - 1.15
NF, ndb. cns., 140-lb. lots or more lb. .58 - .82
smaller lots lb. .59 - .82
Cinnamic, bots lb. 2.15 - 2.75
Decyl, purif, bots. lb. 1.75 - 2.00
mixed isomers, dms., c.l., dlvd. lb. .23 - —
l.c.l., dlvd. lb. .24 - —
tanks, dlvd. lb. .21 - —
normal (see 1-Decanol). lb. .23 - —
Denat., CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis, gal. .59½- .65½
tanks, dlvd. same basis, gal. .41½- —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.

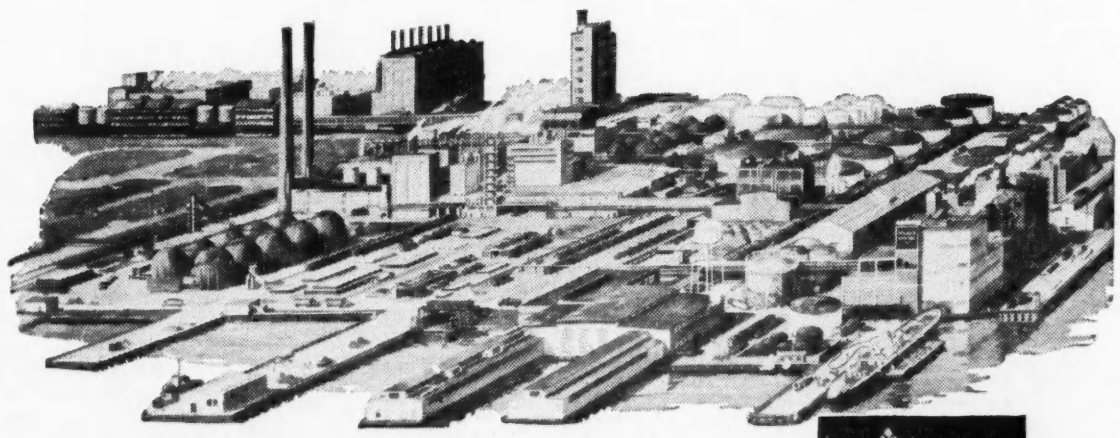
Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.

SD1, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis gal. .60½- .66½
tanks, same basis gal. .42½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis gal. .60½- .66½
tanks, same basis gal. .42½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis gal. .59½- .65½
tanks, same basis gal. .41½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —

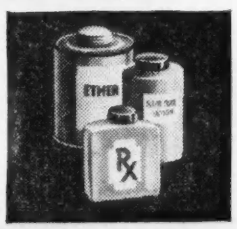
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

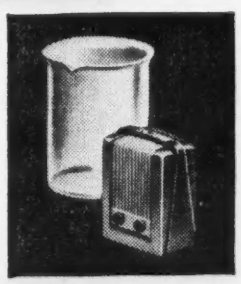
Diacetone, acetone-free, dms., c.l., dlvd. lb. .14 - —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .12 - —
tech., dms., c.l., dlvd lb. .13½- —
l.c.l., dlvd lb. .14½- —
tanks, dlvd lb. .11½- —

# Put This Plant Behind Your Product

Here at Publicker, we maintain that users of our products can no more afford to take chances with quality than we can. Consequently, every drop in every gallon or tank car is exactly according to specifications—always. And Publicker's ultra-modern equipment and vast facilities account for outstanding service to a long list of satisfied customers. May we have the opportunity of meeting *your* requirements?





ETHYL ALCOHOL • BUTYL ALCOHOL, NORMAL
BUTYL ACETATE, NORMAL • ETHYL ACETATE
ACETALDEHYDE • ACETIC ACID GLACIAL
ACETONE C.P. • AMYL ACETATE
FUSEL OIL, REFINED • ISOAMYL ALCOHOL
PACO SOLVENT T.R. 590

**PUBLICKER INDUSTRIES Inc.**

**1429 WALNUT STREET, PHILADELPHIA 2, PA.**

*NEW YORK & NEW ENGLAND DISTRIBUTOR, PUBLICKER ALCOHOL & CHEMICALS SALES CORPORATION*

PHILADELPHIA—LOCUST 4-1400 • PITTSBURGH—LOCUST 1-8527 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022

**Alcohol, ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies** gal. 20.48 - —
i.c.l., same basis gal. 20.53 - 20.59
tanks, same basis gal. 20.35 - —
**tax free, dms., c.l., dlvd. E. of Rockies** gal. .53 - —
i.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
**absolute, 200 pf., tax paid, dms., c.l., dlvd. E. of Rockies.** gal. 21.58 - —
i.c.l., same basis gal. 21.63 - 21.69
tanks, same basis gal. 21.45 - —
**2-Ethylbutyl, dms., c.l., works** lb. .29½ - —
i.c.l. works lb. .30 - —
tanks, works' lb. .28 - —
**2-Ethylhexyl, dms., c.l., dlvd. E.** lb. .23¾ - —
i.c.l., same basis lb. .24¾ - —
tanks, same basis lb. .21¾ - —
**Furfuryl, cns., works** lb. .29 - —
**dms., c.l., Cedar Rapids, Ia** lb. .21 - —
Newark, N. J. lb. .21½ - —
i.c.l Cedar Rapids, Ia... lb. .22 - —
Newark, N. J lb. .22½ - —
tanks, Memphis, Tenn lb. .154 - —
**Isoamyl, dms., c.l., works, frt. alld.** E lb. .34 - —
i.c.l., same basis lb. .35 - —
tanks, same basis lb. .32 - —
**Isobutyl, dms., c.l., dlvd** lb. .14 - —
i.c.l. dlvd lb. .15 - —
tanks, dlvd lb. .12 - —
**Iso-octyl, dms., c.l., dlvd. E** lb. .23 - —
i.c.l., dlvd E lb. .24 - —
tanks, dlvd E lb. .21 - —
dlvd gal. .43 - —
**Isopropyl, refd., 91%, dms., c.l.,** i.c.l., dlvd gal. .55 - —
tanks, dlvd gal. .35 - —
95%, c.l., dlvd gal. .50 - —
i.c.l., dlvd gal. .57 - —
tanks, dlvd gal. .37 - —
99% dms., c.l., dlvd gal. .52 - —
i.c.l., dlvd gal. .59 - —
tanks, dlvd gal. .39 - —
**Lauryl, bots** lb. 3.00 - 2.50
**Methyl** (see Methanol).
**Methylamyl** (see Carbinol, methylisobutyl).
**Octyl, perfumers grade, bots** lb. 1.75 - 3.25
**tech.** (see Octanol, normal).
**2-Phenylethyl, extra, dms** lb. 1.14 - 1.45
standard, dms lb. 1.26 - 1.35
**n-Propyl, dms., c.l., dlvd** lb. .12 - —
i.c.l. dlvd lb. .13 - —
tanks, dlvd lb. .10 - —
**Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa** lb. .54 - —
**dms, c.l., Niagara Falls, N. Y.** lb. .44½ - —
i.c.l., Newark, N. J., Cedar Rapids, Ia lb. .47 - —
tanks, Niagara Falls, N. Y. lb. .43 - —
**indust. grade cms., c.l., Niagara Falls, N. Y** lb. .305 - —
i.c.l., Newark, N. J., Cedar Rapids, Ia lb. .33 - —
tanks, Niagara Falls, N. Y. lb. .29 - —
**Tridecyl, mixed isomers, dms., dlvd.** lb. .26 - —
i.c.l., dlvd lb. .27 - —
tanks, dlvd lb. .24 - —
**Wood** (see Methanol).
**Aldol, 95%, dms., works** lb. .23 - —
**denaturing grade, dms** gal. 2.15 - —
**Aldrin, tech. (ib. dms., c.l., t.l., dlvd** lb. .80 - —
i.c.l., dlvd lb. .85 - —
**Aletris root, bgs** lb. 1.75 - 1.85
**Algin** (see Sodium alginate).
**Allethrin, 90%, dms. frt. alld** lb. 28.80 - 26.90
**soln., 20% dms., 200-2,000 lb. lots, frt. alld** lb. 6.50 - 6.55
**2½%, dms., frt. alld** lb. .95 - 1.00
**Allspice** (see Pimento).
**Allyl bromide, cbys., works** lb. 1.35 - 1.40
**Chloride, dms., c.l., dlvd** lb. .17 - —
i.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .15 - —
**Starch, solid, dms., works** lb. .52¾ - .54¾
**solution, 40%, toluol-butanol, dms., works** lb. .25½ - .26¼
**Aloe, Cape, cs** lb. .40 - —
powd., cs lb. .50 - —
**Curacao, kgs** lb. .50 - .55
**Socotrine, kgs** lb. No prices
**Aloin, USP, bbls., dms., kgs** lb. 3.75 - 3.82
**Alphanaphthol** (see a-Naphthol).
**Alphanaphthylamine** (see a-Naphthylamine).
**Alphanitronaphthalene** (see a-Nitronaphthalene).
**Alphapicoline** (see a-Picoline).
**Alphaterpineol** (see a-TerpineoD.
**Alphatocopherol** (see a-TocopherolD.
**Alum, ammonium, gran., bgs., works** 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
**USP, burnt, dms** lb. .20 - .21
**hydrous, dms** lb. .07¾ - .08
**Potassium, gran., bgs., works.** 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
**USP, burnt, dms** lb. .20 - .21
**hydrous, dms** lb. .07¾ - .08
**Potash-chrome, dms** lb. .17 - —
**Sodium, dms., c.l., works** 100 lbs. 4.60 - —
i.c.l. works 100 lbs. 5.00 - —
**Alumina, calcined, bgs., c.l., works.** lb. .0385 - —
i.c.l., works lb. .0410 - .0510
**Aluminum acetate, basic soln., 24°, bbls., i.c.l., works** lb. .14 - —
**Chloride, coml., anhyd., dms., c.l., works, frt. equald** lb. .15 - —
i.c.l., works, frt. equald. lb. .1550 - —
cryst., dms., c.l., works lb. .1450 - —
i.c.l., works lb. .1500 - —
**soln., 32°, cbys., c.l., works** lb. .0445 - —
i.c.l., works lb. .0520 - .1295
tanks, works 100 lbs. 3.45 - —
**NF, gran., dms., works** lb. .29 - .30
**Fluoride, tech., anhyd., bgs., c.l., works** lb. .15¾ - —
i.c.l., works lb. .16¾ - .18¾
**Aluminum fluoride in fib. dms. 0.35c. per lb. higher.**
**Formate, basic soln., cbys** lb. .09½ - —
i.c.l., works lb. .10 - —
**Hydrate, heavy bgs., c.l., frt. equald** lb. .0283 - —
**2,000-20,000 lb. lots, same basis** lb. .041 - —
**bulk, same basis** lb. .026 - —
**light, bgs., dlvd** lb. .17 - —
**Hydroxide, gel, pharmaceutical, 14-15%, $Al_2O_3$, fib. dms., works** lb. .22 - —
contract, works lb. .21 - —
**9-9½% $Al_2O_3$, fib. dms., works** lb. .19 - —
contract, works lb. .18 - —
**dried, USP, XIV, fib. dms., works** lb. .82½ - —
contract, works lb. .79½ - —
**tech., powder** (see Aluminum hydrate).
**Metal, 99%+, ingots, 10,000-lb. lots, frt. alld** lb. .232 - —
**pigs, 10,000-lb. lots, frt. alld.** lb. .215 - —
**Oxide, amorphous** (see Alumina, calcined).
**Paste, lining, extra-fine, dms** lb. .63½ - —
**standard, 200-lb. dms** lb. .43 - —

**Aluminum powder, lining, extra, fine, dms** lb. 1.02½ - —
**standard, 250-lb. dms** lb. .72 - —
**Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10-lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.**
**Resinate, precip., 2.1% Al, dms., frt. alld** lb. .30½ - —
**Stearate, dibasic, ctns., c.l.** lb. .33 - —
i.c.l. lb. .34 - .37
**monobasic, ctns., c.l.** lb. .33 - —
i.c.l. lb. .34 - .37
**tribasic, ctns., c.l.** lb. .33 - —
i.c.l. lb. .34 - .37
**Sulfate, coml., bulk, c.l., works.** 100 lbs. 1.85 - —
grd., bgs., c.l., works ton. 37.00 - —
lump, bgs., c.l., works ton. 40.00 - —
**iron-free, bgs., c.l., works, frt. equald** 100 lbs. 3.55 - —
i.c.l., works, frt. equald. 100 lbs. 3.95 - —
**USP, gran., dms., works** lb. .16 - .18
powd., dms., works lb. .36 - .37
**Trihydrate, heavy** (see Aluminum hydrate, heavy).
**Ambergris gray, bots** oz. 8.00 - 10.00
**Aminoazotoluene, base, bbls., 100% basis** lb. 1.03 - 1.18
**o-Aminobiphenyl, dms., c.l., works** lb. .32½ - —
i.c.l., works lb. .33 - —
tanks, works lb. .31 - —

**Aminoethyl ethanolamine, dms., c.l., dlvd** lb. .46¼ - —
i.c.l. dlvd. lb. .45 - —
tanks, dlvd lb. .45 - —
**2-Amino-2-methyl-1-propanol, cns., dms., i.c.l., works** lb. .60 - —
**m-Aminophenol, dist., dms., ton lots.** lb 2.05 - —
smaller lots lb. 2.50 - —
**p-Aminophenol, dms., frt. alld** lb. .97 - .98
**Aminophylline, USP 100-lb. dms** lb. 3.55 - —
**Ammonia, anhyd., fertilizer, tanks, works, frt. equald** ton. 85.00 - 88.00
**pure cyls., extra, zone 1** lb. .18½ - —
2 lb. .19 - —
3 lb. .19½ - .20
4 lb. .20 - —
5 lb. .21 - —
**refrigeration, tanks, works, frt. equald** ton. 87.50 - 90.50
**aqueous (29.4% $NH_3$), dms., c.l., dlvd. Metropolitan area** 100 lbs. 3.60 - —
i.c.l., works 100 lbs. 4.00 - —
**tanks, works, anhyd. basis.** ton. 96.00 - —
**Ammoniac, sal, gray, bgs., c.l., works, frt equald** 100 lbs. 8.25 - —
i.c.l., same basis 100 lbs. 8.65 - 11.15
**white, gran.** (see Ammonium chloride, tech.)
**Ammoniacal liquor, tanks, works, anhyd basis** ton 96.00 - —
**Ammonium acetate, purif., dms** lb. .58 - —
**Benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld** lb. .80 - —
smaller lots, frt. alld lb. .81 - 1.08
**Biborate, gran., dms., c.l., works.** ton. 317.00 - —
ton lots, ex whse. ton. 390.50 - —
smaller lots, ex whse. ton. 395.50 - —

## Alcohol, Ethyl—Ammonium Pentaborate

**Ammonium bicarbonate, dom., dms., c.l., works** 100 lbs. 6.50 - —
i.c.l., works 100 lbs. 8.00 - —
**imp., dms., i.c.l.** lb. .07¼ - .08½
**Bichromate, dms., works** lb. .42 - .43
**Bifluoride, dms., dlvd** lb. .2145 - .2245
**Bromide, NF, gran., bbls** lb. .39 - —
**Powdered ammonium bromide 10c. per lb. higher.**
**Carbonate, USP, lump, dms** lb. .16 - —
**Chloride tech., white, fines, gran., bgs., c.l., works** 100 lbs. 5.25 - —
i.c.l., works 100 lbs. 7.00 - —
**USP, gran., bbls., dms** lb. .17¼ - —
**Citrate, dibasic, bbls** lb. .75 - —
**dms.** lb. .30 - .85
**Dichromate** (see Ammonium bichromate).
**Fluoride** (see Ammonium bifluoride).
**Hydroxide** (see Ammonia, aqueous).
**Hypophosphite, NF, dms** lb. 3.07 - —
**Iodide, NF, dms., bots** lb. 4.26 - 4.38
**Linoleate 80% dms., works** lb. .50 - .55
**Nitrate dom., fertilizer grade, 33.5% N., bgs., western, works, frt. equald** ton. 68.00 - —
**with dolomite, 20.5% N, bgs., Hopewell, Va** ton. 51.00 - —
**imp., Canadian, 33.5% N, eastern. bgs., c.l., ship't point, frt. equal to $6 per ton.** 74.50 - —
**western, bgs., c.l., f.o.b. cars, Los Angeles.** ton. 84.89 - —
**Oxalate, fine gran., dms** lb. .26½ - .31
**Pentaborate, gran., dms., c.l., works** ton. 227.00 - —
ton lots, ex whse ton. 300.50 - —
smaller lots, ex whse ton. 305.50 - —
**Ammonium pentaborate powder, $10 per ton higher.**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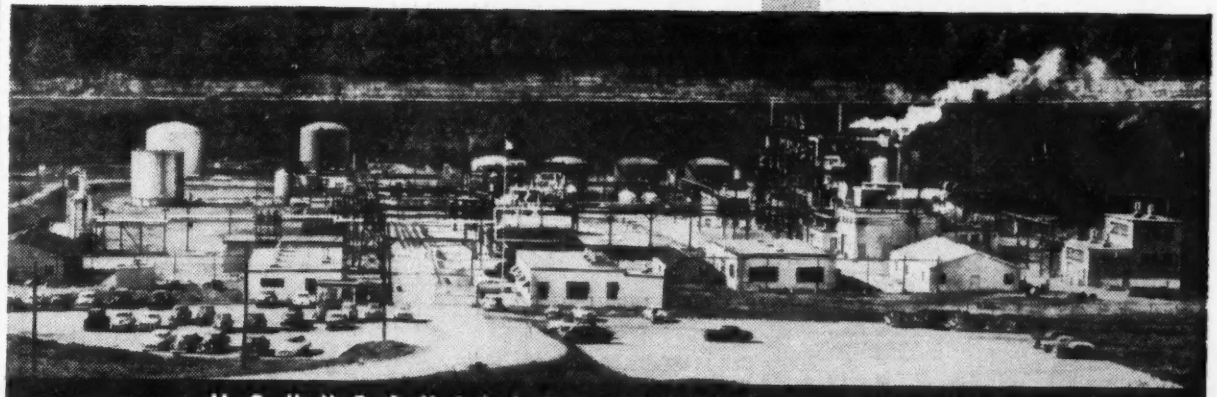

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| Maleic Acid, max. | 0.1% |

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## Ammonium Perchlorate—Benzoyl Peroxide

Ammonium perchlorate, kgs., works. lb. .50 - 75
Persulfate, kgs. lb. .46½ - .47½
Phosphate, coml., bgs., c.l., works, frt. equald lb. .0865 - —
l.c.l. same basis lb .09 - —
dibasic, NF, V bbls., dms. lb. .46 - —
tech. bgs. c.l works, frt. equald lb. .0865 - —
l.c.l., same basis lb. .0915 - —
Salicylate, NF, dms., kgs. lb. 1.62 - 1.64
Silicofluoride, dms., works lb. .11 - .12
Sulfamate, bgs., c.l., t.l., works. lb. .18 - —
l.c.l., works lb. .22 - —
Sulfate, coke-oven, bulk, producing ovens, base price ton.42.00 - 47.00
June-July shipt ton.39.00 - 44.00
Aug.-Sept. shipt ton.40.00 - 45.00
Oct.-Nov. shipt ton.41.00 - 46.00
syn., bgs., c.l., western, works ton 44.00 - —
bulk, works ton 42.00 - —
purif., dms., works lb. .09 - .09½
Sulfide, liq., 40-44%, dms., c.l., frt. equald., 100% basis. ton.240.00 - —
l.c.l., works, 100% basis. ton.300.00 - —
tanks, frt. alld., 100% basis. ton.180.00 - —
Sulfocyanide, tech. (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 - —
l.c.l., works lb. .22 - .26
Thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.55
highly purif., cbys., 100% basis. lb. 1.70 - 1.96

Ammonium thiosulfate, cryst., photo grade, fib. dms., frt. alld. lb. .65 - —
60% soln., dms., c.l., works lb. .06½ - —
d-Amphetamine hydrochloride dibasic, bots. lb.28.00 - —
dl, dms lb. 6.00 - —
d-monobasic, bots lb.23.00 - —
d-Phosphate, dibasic, bots. lb.28.00 - —
dl, dms lb. 6.00 - —
d-Sulfate, dms lb 28.00 - —
dl, dms lb. 6.00 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., frt. alld. E. of Rockies lb. .22 - —
l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
ex pentane, reg., dms., c.l., dlvd. lb. .17 - —
l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
tech., dms., c.l., dlvd. lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
Alcohol (see Alconol amyl).
n-butyrate, dms. lb. .90 - 1.25
Cinnamic, aldehyde, dms lb. 1.75 - 2.20
Nitrite, USP, bots lb. 1.75 - 1.83
Salicylate, cns., dms lb. .74 - 1.05
o-tert-Amyl phenol, dms., c.l., works. lb. .43¾ - —
l.c.l., works lb. .46¾ - —
tanks, works lb. .41¾ - —
p-tert-Amyl phenol, dms., c.l., works. lb. .24¾ - —
l.c.l., works lb. .25¾ - —
tanks, works lb. .23¾ - —
Anethole, NF, cns., dms lb. 1.85 - —
tech., dms lb. 1.10 - —
Angelica root, dom., bls lb. .60 - .70

Anise seed, Mexican, bgs lb. .32 - —
Spanish, bgs. lb. .34 - —
Syrian, bgs. lb. No prices.
Aniline oil, dms., c.l., works, frt. alld lb. .21 - —
l.c.l., works, frt. alld lb. .22 - —
tanks, works, frt. alld lb. .20 - —
Salt, dms., c.l., truckloads, 20,000 lbs., min., frt. alld lb. .31 - —
l.c.l., same basis lb. .33 - —
Anisic aldehyde, bots., dms lb. 1.80 - 2.70
o-Anisidine, dms., works lb. .88 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, whole, bgs. lb. .24 - —
powd., dms. lb. .28 - —
Anthracene, 90-95%, bbls., ton-lots, works lb. .70 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5%, bbls, c.l., frt. alld lb. .83 - —
l.c.l., same basis lb. .86 - —
electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride).
Metal, bulk, c.l., mines lb. .28½ - —
cs., c.l., mines lb. .29 - —
Oxide, bgs., c.l., frt. alld lb. .27 - .29
l.c.l., frt. alld lb. .28½ - .30½
Sulfide, approx. 65%, bgs., dlvd. lb. .28½ - .31½
Trichloride anhyd., pails, c.l., works lb. .38½ - —
l.c.l., works lb. .40½ - —
USP, powd., dms lb. .64 - .65
Antimony-potassium tartrate, tech., powd., dms lb. .60½ - .65½
Antipyrine, NF, 200-lb. bbl lb. 3.50 - —
Apomorphine hydrochloride, USP, bots oz.23.40 - 23.90
Areca nuts, powd., bbls lb. .15 - .16
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00

1-Arginine monohydrochloride, dms., 1 kilo lots. kilo.74.00 - 83.00
Arnica flowers (true montana), bls. lb. 3.00 Nom.
Arsenic metal, lump, bbls., ex whse. lb. .54 - —
Trioxide, USP, dms lb. .48 - —
White, powd., bbls., c.l., dlvd. lb. .05½ - —
l.c.l., dlvd lb. .06½ - .07½
Asafetida, cs lb. .36 - .39
powd., bbls., dms lb. .50 - .53
Asbestine (see Talc, fibrous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines ton.1,300.00 - —
No. 2, c.l. (20 tons), mines ton.675.00 - —
Run-of-mine, c.l., (20 tons), mines ton.556.00 - —
3K, c.l. (20 tons), mines ton.436.00 - —
3R, c.l. (20 tons), mines ton.371.00 - —
3T, c.l. (20 tons), mines ton.348.00 - —
3Z, c.l. (20 tons), mines ton.321.00 - —
4K, c.l. (20 tons), mines ton.173.00 - —
4M, c.l. (20 tons), mines ton.173.00 - —
4T, c.l. (20 tons), mines ton.156.00 - —
4Z, c.l. (20 tons), mines ton.156.00 - —
5D, c.l. (20 tons), mines ton.122.50 - —
5K, c.l. (20 tons), mines ton.122.50 - —
5M, c.l. (20 tons), mines ton.116.50 - —
5R, c.l. (20 tons), mines ton.110.00 - —
6D, c.l. (30 tons), mines ton.78.00 - —
7D, c.l. (30 tons), mines ton.68.50 - —
7F, c.l., (30 tons), mines ton.65.00 - —
7H, c.l. (30 tons), mines ton.55.00 - —
7K, c.l. (30 tons), mines ton.46.00 - —
7M, c.l., (30 tons), mines ton.40.00 - —
7R, c.l. (30 tons), mines ton.39.00 - —
7RF, c.l. (30 tons), mines ton.40.00 - —
7T, c.l. (30 tons), mines ton.37.00 - —
7TF, c.l. (30 tons), mines ton.40.00 - —
7S, c.l., (30 tons), mines ton.27.00 - —
Asbestos c.l. prices are in U. S. funds, l.c.l., lots, $4 per ton higher.
Asphalt gilsonite, black, jet, bgs., c.l., mines ton.37.00 - —
select, 350° F., fusing pt., bgs., c.l., mines ton.38.00 - —
270°-295°F., fusing pt., bgs., c.l., mines ton.37.00 - —
seconds, 300° - 390°F. fusing pt., bgs., c.l., mines ton.32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼ - —
petroleum, cut-back, tanks, tankwagon, refy. gal. .09 - —
emulsion, tanks, tankwagon, refy gal. .09½ - .10
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin (see Acid, acetylsalicylic).
Atropine, USP, bots. oz. 6.25 - 6.75
Sulfate, USP, bots. oz. 4.00 - 4.20

## B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units 50,000 units. .75 - —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry, root bark, bgs lb. .28 - .30
Barbital, USP, 100-lb. dms lb. 4.50 - —
Sodium, USP, dms lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works ton.92.50 - —
smaller lots, works ton.102.50 - —
Chlorate, kgs., works lb. .32 - .36
Chloride, anhyd., bgs., c.l., works. ton.158.00 - —
l.c.l., works ton.168.00 - —
NF, cryst., dms. lb. .20 - —
tech., cryst., dms., c.l., works. 100 lbs. 6.00 - —
l.c.l., works 100 lbs. 6.50 - —
Chromate, bgs., frt. equald lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate cryst., bgs ton.180.00 - 190.00
Monoxide (see Oxide).
Nitrate bbls., c.l., works lb. .12½ - —
l.c.l., works lb. .14 - —
Oxide, grd., dms., frt. equald. ton.255.00 - —
l.c.l., works ton.265.00 - —
Peroxide, dms., works lb. .16 - —
Stearate, cms., c.l., frt. alld lb. .37 - —
l.c.l., same basis lb. .38 - .42
Sulfate, tech. (see Barytes and Blanc fixe),
X-ray, dms. lb. .15 - .15¼
Sulfide, dms., c.l., works ton.85.00 - —
l.c.l., works ton.95.00 - —
Barytes, Southern, off-color, bgs., mines ton.25.00 - —
95-75%, bgs., mines ton.25.00 - —
water-grd., paper bgs., c.l., E. St. Louis ton.41.60 - —
ex-whse., N. Y. ton.60.10 - —
Bauxite, bulk, mines ton. 9.50 - 10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls lb. .35 - .37
root, bls lb. .45 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines ton.14.00 - —
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse. ton.80.60 - —
1 ton-lots, ex whse. ton.83.10 - —
low gel., bgs., 5-ton lots, ex whse. ton.78.95 - —
1-ton lots, ex whse. ton.81.45 - —
Benzal chloride, cbys., works lb. .22 - .23¼
Benzaldehyde, NF, dms lb. .74 - 1.05
tech., cbys., dms lb. .44 - —
Benzene (see Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., high gamma, bgs., c.l., dlvd., gamma unit-lb. .007 - .0075
l.c.l., works, gamma unit-lb. .0085 - .009
low gamma, bgs., c.l., dlvd., gamma unit-lb. .006 - .0065
l.c.l., works, gamma unit-lb. .0075 - .008
Benzidine hydrochloride, bbls., frt. alld., 100% basis lb. 1.00 - —
Benzocaine, dms lb. 3.48 - 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa. gal. .36 - —
Birmingham district gal. .36 - —
Chicago district gal. .36 - —
Cleveland district gal. .36 - —
Geneva, Utah gal. .36 - —
Johnstown, Pa. gal. .36 - —
Lackawanna, N. Y. gal. .36 - —
Lone Star, Texas gal. .36 - —
Lorain, Ohio gal. .36 - —
Middletown, Ohio gal. .36 - —
Minnequa, Colo gal. .36 - —
Philadelphia district gal. .36 - —
Pittsburgh district gal. .36 - —
Sparrows Point, Md. gal. .36 - —
Syracuse, N. Y. gal. .36 - —
Terre Haute, Ind. gal. .36 - —
Youngstown, Ohio gal. .36 - —
Benzophenone dms lb. 1.40 - 1.70
Benzotrichloride, cbys., frt. equald. lb. .18 - .30
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
l.c.l., same basis lb. .23 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
Peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .93 - 1.03


20° and 22° Baumé Water White and Commercial Grades Available in Tank Car Quantities from Niagara Falls, New York

20° Baumé Commercial Grade Muriatic Acid is also available for prompt tank car shipments from Carlsbad, New Mexico.

specifications
20° and 22° Baumé Water White Grade

COLOR.....WATER WHITE
IRON.....0.0001% MAXIMUM
FREE CHLORINE.....NONE
ARSENIC.....NONE
INORGANIC SALTS.0.002% MAXIMUM
SULFATES.....0.0003% MAXIMUM
ORGANIC MATTER 0.0002% MAXIMUM
SUSPENDED MATTER.....NONE

MURIATIC ACID

*International's Muriatic Acid* is produced from inorganic materials and, at the Niagara Falls Plant, is made directly by burning hydrogen with chlorine. You can be sure of the purity, quality and consistency of grade to specifications. Muriatic Acid, in the grade and quantity you require, is available for prompt shipments. We shall be glad to send samples on request.

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MINING·REFINING·MANUFACTURING CAUSTIC POTASH—*all standard grades;* CARBONATE OF POTASH—*all standard grades;* POTASSIUM CHLORIDE—*refined and technical grades;* SULFATE OF POTASH; LIQUID CHLORINE; MURIATIC ACID.

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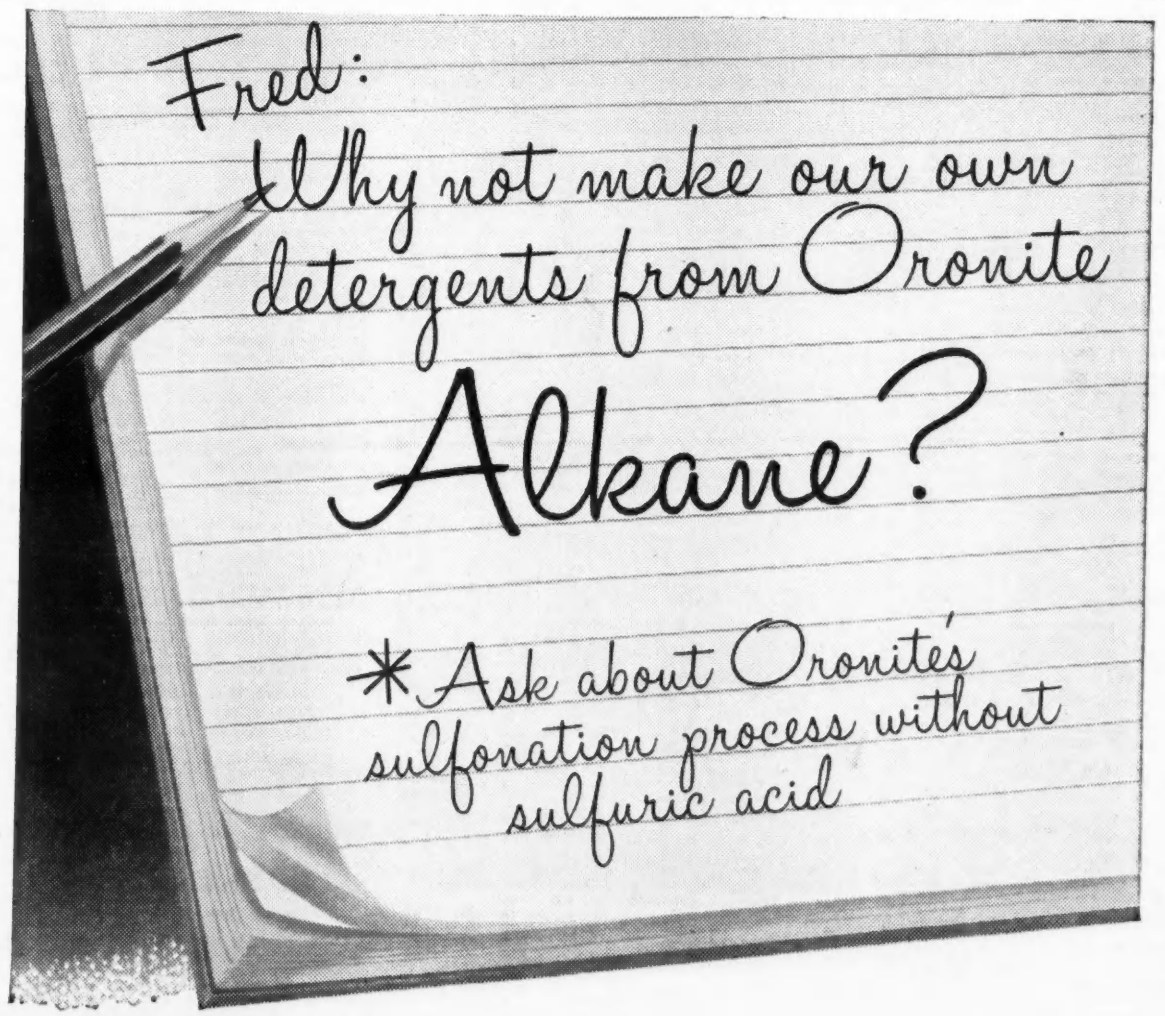
*Address all inquiries to Industrial Sales Dept., Potash Division*
*General Offices: 20 North Wacker Drive, Chicago 6*
*61 Broadway, New York 6 • Midland, Texas*

Benzyl acetate, f.f.c., cns., dms. lb. .62 - 1.04
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c., cns., dms. lb. .62 - 1.10
Chloride, tech., 13-gal. cbys., dms., c.l., works, frt. equald lb. .23 - —
l.c.l., same basis lb. .24 - —
tank trucks, same basis lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c. lower.
Cinnamate, cns. lb. 3.60 - 3.90
Formate, cns. lb. 1.30 - 2.10
Isoeugenol, cns. lb. 8.60 - 9.10
Propionate, bots. lb. 1.35 - 1.65
Salicylate, bots. lb. 1.50 - 1.85
Benzylidine acetone, bots. lb. 1.68 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns. lb. 35.00 -36.25
Hydrochloride, bots. lb. 35.00 -36.25
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical)
Biotin cryst., bots gram. 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars lb. 5.11 - —
Hydroxide, dms. lb. 4.65 - —
Metal, bxs., ton lots lb. 2.25 - —
Nitrate, cryst., dms lb. 2.10 - 2.17
Oxide, anhyd., dms lb. 4.47 - 5.05
Oxychloride, dms lb. 4.37 - 4.42
Phenolsulfonate, fib. dms. lb. 5.22 - —
Subcarbonate, USP, dms lb. 3.20 - —
Subgallate, NF, fib. dms lb. 3.15 - —
Subiodide, fib. dms. lb. 5.37 - —
Subnitrate, NF, dms lb. 2.65 - —
Subsalicylate, USP, dms lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Black, acetylene, bgs., c.l., duty and freight extra lb. .17 - —
cs., l.c.l., ex whse lb. .22½ - .26
Ash (see Barium sulfide).
Bone, dms. l.c.l., frt. alld. lb. .17 - .23¼
Pacific coast bone black prices, 2c. per lb. higher
Carbon, channel, pigment, high color, beads, ctns., c.l., works. lb. .72 - —
l.c.l., dlvd. or whse. lb. .78 - —
medium color, uncompressed, bgs., c.l., works, lb. .12 - —
l.c.l., dlvd. or whse. lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
l.c.l., works lb. .1225 - —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, bulk, c.l., works, lb. .0750 - —
bgs., c.l., works lb. .0790 - —
l.c.l., dlvd. or whse lb. .122 - .125
high modulus, bgs., c.l., works, lb. .0550 - —
ctns., l.c.l., whse lb. .0950 - —
semi-reinforcing bgs., c.l., works lb. .045 - —
bgs., ctns., l.c.l., whse lb. .085 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works, lb. .13¼ - —
l.c.l., works lb. .13½ - —
Lamp, bgs., c.l., works lb. .16 - .45
Mineral, bgs., works lb. .0160 - .0675
Blackberry root bark, bls lb. .45 - —
Black haw root bark, bls lb. .63 - .63
tree bark, bls lb. .40 - .45
Blanc fixe, dry, byproduct, bgs., c.l., works ton. 190.00 - —
l.c.l., works ton. 200.00 - —
direct process, bgs., c.l., works, ton. 100.00 - —
l.c.l., works ton. 110.00 - —
N. Y. whse ton. 140.88 -165.00
Bleaching powder, dms., c.l., works, 100 lbs. 5.02 - —
l.c.l., works 100 lbs. 6.52 - —
Blood, dried, 16-16½% ammonia, bgs., unit-ton. 5.15 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. 4.75 - —
soluble, bgs., c.l. lb. .14 - 17
l.c.l. lb. .18 - .25
Bloodroot bls. lb. .48 - .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N. or Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.10 - —
toner, 125-lb. bbls., litho flushed, same basis lb. 1.20 - —
Chinese, bbls., same basis lb. .49 - —
Cobalt, genuine, bbls., same basis lb. 4.90 - —
Imitation (see Blue ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese Milori, Potash Prussian and Soda).
Methyl violet toner, molybdated, PMA, bbls., same basis lb. 2.60 - —
tungstated, PTMA, bbls., same basis lb. 4.00 - —
Milori, bbls., same basis lb. .49 - —
Peacock, fugitive, 100% color strength, bbls., same basis, lb. .75 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb. .56 - —
Prussian, insoluble, bbls., same basis lb. .49 - —
soluble, bbls., same basis lb. .49 - —
Soda, CP, bronze, bbls., same basis lb. .56 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30½ - .33
jobbing types, bbls., same basis, lb. .16½ - .18½
regular types, dry, bbls., same basis lb. .22½ - .33
Victoria toner, molybdated, PMA, bbls. lb. 4.10 - —
tungstated, PTMA, bbls. lb. 5.13 - —
Blue dry colors, dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher. Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vitrol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E. ton. 70.00 - —
Los Angeles ton. 82.00 - —
Bone phosphate defluorinated (see D)
of lime (see Calcium phosphate, tribasic).
precipatated (see Calcium phosphate tribasic, NF, precip.).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton. 78.00 - —
ton lots ex whse, N. Y. or Chicago ton. 125.75 - —
bulk, c.l., works ton. 70.00 - —
Borax, tech., cryst., 99½%, bgs., c.l., works ton. 67.25 - —
ton lots, ex-whse., N. Y. or Chi ton. 115.00 - —
smaller lots, same basis, ton. 120.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton. 41.25 - —
ton lots, ex whse., N. Y., Chi ton. 89.00 - —
smaller lots, same basis, ton. 94.00 - —
bulk, c.l., works ton. 35.75 - —
pentahydrate, 99½%, bgs., c.l., works ton. 55.50 - —
ton lots, ex whse., N.Y., Chi ton. 108.25 - —
smaller lots, same basis, ton. 103.25 - —
powd., 99½%, bgs. ton. 46.25 - —
ton lots, ex-whse., N. Y. or Chi. ton. 94.00 - —
smaller lots, same basis, ton. 99.00 - —
Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld, or nearest whse. pt. lb. .18 - .24
l.c.l., same basis lb. .19 - .26
Borneol, cns lb. 2.50 - 4.50
Borontrifluoride gas, cyls., truckload, works lb. .62 - —
lers truckload, works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd, E. of Rockies lb. .31 - —
l.c.l., same basis lb. .33 - .38
Bromine, purif., ref. dms., c.l., t.l., dlvd. E. of Rockies lb. 30 - —
l.c.l., same basis lb. .30 - .32
tanks, same basis lb. .21½ - —
Bromoform, pharmaceutical grade, bots lb. 1.62 - 2.60
cbys. lb. 1.52 - —
Bromstyrol, bots lb. 5.40 - 5.70
Bronze powder aluminum (See A).
Brown, iron oxide, pure, bgs., c.l., works lb. .14¼ - —
l.c.l., works lb. .14½ - —
Oxide, metallic, bgs., works lb. .04 - —
Sienna, burnt, paper bgs., c.l., works lb. .04¼ - .15¼
l.c.l., works lb. .04½ - .15½
raw, paper, ogs., c.l., works lb. .04½ - .13
l.c.l., works lb. .04¾ - .13¼
Umber, burnt, American, bgs., c.l., works lb. .06 - —
l.c.l., works lb. .06¼ - .07
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .06¾ - —
l.c.l., works lb. .07 - —
raw, American, bgs., works lb. .06¾ - .06½
Turkey-type, bgs., works lb. .06¾ - .07
Vandyke bbls., works lb. .09½ - .12
Brucine, cns., 100-oz. lots oz. .20 - .25
Sulfate, NF, cns., 100-oz. lots oz. .15 - .20
Buchu leaves, bls lb. .65 - —
Butadiene, refd., cyls., refy lb. .22 - —
tanks, refy lb. .15 - —
Butane, indust., tanks, group 3 gal. .02½ - —
N. Y. harbor gal. .08 - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —

## Benzyl Acetate—Butyric Ether

n-Butyl acetate, syn., dms., c.l., dlvd, E. lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
Alcohol (see Alcohol, n-Butyl).
sec-Butyl acetate, syn. dms., c.l., dlvd. E lb. .12½ - —
l.c.l., same basis lb. .13¼ - —
tanks, same basis lb. .10¾ - —
Aldehyde (see Butyraldehyde)
Chloride, dms., c.l., works lb. .37½ - —
t.c.l. works lb. .38 - —
Ether, dms., c.l., works lb. .31½ - —
l.c.l., works lb. .32 - —
tanks, works lb. .30 - —
Lactate, dms., c.l., frt. alld, E. of Rockies lb. .35 - —
l.c.l., same basis lb. .36 - —
tanks, same basis lb. .33 - —
Laurate, dms., works lb. .39 - —
Methacrylate, dms., c.l., t.l., works, lb. .70 - —
l.c.l., works lb. .55½ - —
Oleate, refd., dms., l.c.l., works lb. .32 - —
Phenylacetate, dms lb. 4.50 - 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms, l.c.l., frt. equald lb. .24 - .27
Butylamine (see mono-, di-, and tri-).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .49 - —
l.c.l., works lb. .50 - —
tanks, works lb. .48 - —
p-tert-Butylphenol, bgs., c.l., works, lb. .25½ - —
l.c.l., works lb. .26½ - —
Butyraldehyde, dms., c.l., dlvd lb. .21½ - —
l.c.l. dlvd lb. .22½ - —
tanks, dlvd lb. .19½ - —
Butyric ether (see Ethyl butyrate).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Mercantile Securities Building, Dallas 1, Texas ■ Carew Tower, Cincinnati 2, Ohio

## Cacao Butter—Cyclohexanone

# C

Cacao butter (see Cocoa butter).
Cadmium iodide, 25-lb. fib. dms lb. 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.35 - —
hydrous, dms., 100-lib. lots or more lb. 3.15 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.35 - —
hydrous, 100-lb. lots or more. lb. 3.15 - —
citrated, USP, dms., 100-lb. lots or more lb. 2.90 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots, works. gram. .65 - —
in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adjusted lb 7.00 - —
smaller lots same basis lb 7.05 - 7.50
Arsenate, dealers, dms., c.l., whse. works, frt. alld. on 96 lbs. or over lb. .09 - .10
l.c.l., same basis lb. 10 - —
Bromide, NF, jars lb. .90 - .94
Carbide, standard generator size, dms. c.l. dlvd ton 134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 7.50 -10.00
chalk, whiting, 325 mesh, bgs. works ton 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
precip., dense bgs. c.l., works. ton.30.00 -33.00
l.c.l., works ton.40.00 -48.00
medium, bgs., c.l., works ton.35.00 - —
l.c.l., works ton.45.00 -50.00
surface treated, bgs., c.l., works ton.35.00 -50.00
l.c.l., works ton.45.00 -65.00
ultrafine, bgs., c.l., works. ton.110.00 160.00
l.c.l., works ton.120.00 -175.00
Chloride, cryst., purif., dms lb. .27 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald ton.27.00 - —
liquor, 40%, tanks, frt. equald. ton.11.35 - —
pellets, bgs., c.l., works ton.33.00 - —
powd., bgs., c.l., works ton.37.65 - —
solid, 73-75%, dms., c.l., frt. equald ton.25.50 - —
l.c.l., works, same basis. ton.34.00 -71.00
USP, gran., dms. lb. .32 - —
Chromate, bgs., frt. equald lb. .29½ - .30
Cyanide, dms., dlvd. E. of Rockies lb. .24 - .50
Cyclamate, fib. dms., 5,000 lbs. or more lb. 2.95 - —
2,500-5,000-lb. lots lb. 3.10 - —
1,000-2,500-lb. lots lb. 3.25 - —
Gluconate, AA, bbls., dms lb. .70 - .72
USP, bbls. dms lb. .53 - .65
Glycerophosphate, NF, fib. dms. lb. 2.30 - 2.45
Hydride, dms., works lb. 2.15 - 3.00
Hypochlorite, high test, cased (45 lbs.), dlvd. E. of Rockies cs.22.60 -24.75
dms. 100-lb. same basis dm 28.65 -32.50
Hypophosphite, dms., ton lots or less lb. .90 - .93
Iodide, jars lb. 4.52 - —
Lactate, USP, dms., 10,000-lb. lots or more, works lb. .40 - —
smaller lots, works lb. .41 - .48
Mandelate, USP, dms., works lb. 2.10 - 2.25
Naphthenate, liq., 4%, Ga., dms., frt. equald lb. .27¼ - —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton.46.00 - —
tech., dms., works lb. .13 - —
d-Pantothenate, jars, 100-gram lots or more, frt. adjusted. gram .07½ - —
Para-aminosalicylate (see Calcium p-Aminosalicylate).
Phenolsulfonate, dms lb. .70 - —
Phosphate dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.10 - —
l.c.l., frt. equald 100 lbs. 7.60 - 7.95
feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.79.55 - —
l.c.l., frt. equald ton.88.80 -89.55
20% P, bgs., c.l., t.l., frt. equald ton.84.55 - —
l.c.l., frt. equald ton.96.00 - —
21% P, bgs., c.l., t.l., frt. equald ton.90.30 - —
l.c.l., frt. equald ton.100.30 -100.80
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 6.05 - —
smaller lots, same basis. 100 lbs. 6.55 - —
tribasic, precip., NF, bgs., c.l., frt. equald. 100 lbs. 7.60 - —
l.c.l., frt. equald 100 lbs. 7.95 - —
Phytate, bgs., works lb. .37 - —
Resinate, precip., dms., frt. alld., works lb. .30½ - —
Silicate, hydrated, bgs., c.l., works. lb. .06 - —
l.c.l., works lb. .06½ - —
paint grade (see Wollastonite).
Stearate, ctns., c.l. lb. .35 - —
l.c.l. lb. .36 - .40
Sulfate (see Gypsum).
Calomel, USP, powd., dms lb. 5.42 - —
Camphene 46° m.p., dms., incl., c.l., works lb. .128 - —
l.c.l., same basis lb. .143 - —
tanks, same basis lb. .103 - —
Chlorinated 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb 3.00 - 3.12
nat., USP, powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .75 - .80
syn., tech., 1 bbl. or more lb. .52 - —
USP, gran., powd., bbls, 2,000-lb. lots lb. .59 - —
1,000-lb. lots lb. .60 - —
smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
1,000-lb. lots lb. .91 - —
smaller lots lb. .92 - —
Canada balsam (see Fir balsam).
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs lb. 2.25 - 2.30
Russian, bgs lb. 4.00 - 4.05
powd., bxs lb. 4.35 - 4.40
Capsicum (see Pepper red).
Oleoresin, NF, from domestic pepper, dms. lb. 4.50 - 5.25
from African pepper, dms. lb. 4.35 - 5.00
Caraway seed, Dutch, bgs lb. .18 - —
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbinol, methyl isobutyl (see Methyl isobutyl carbinol).
Carbon dioxide, indust., wholesale, bulk, dlvd. metropolitan area. ton.73.00 -115.00
cyls., same basis lb. .08 - —
solid, same basis lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. alld. to competitive points lb. .07 - —
l.c.l., same basis lb. .08½ - .09
Carbon disulfide, 5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
less than 30 dms lb. .16 - —
tanks, same basis lb. .0515- —
Tetrachloride, CP, dms., l.c.l., frt. alld lb. .10½ - .13¼
tech., consumers, dms. c.l., E. Rockies, frt. alld lb. .10 - .10½
W. of Rockies, f.o.b. stockpoints lb. .10½ - .11
l.c.l., E. of Rockies, frt. alld lb. .11¾ - .12¼
W. of Rockies, f.o.b. stockpoints lb. .12¼ - .12¾
tanks, E. of Rockies, frt. alld lb. .08½ - .09
W. of Rockies, f.o.b. stock-points lb. .09 - .09½
Carboxymethyl cellulose (see CMC).
Carbromal NF, dms. 100-lb lots, works lb 4.00 - 4.25
smaller lots, works lb 4.10 - 4.75
Cardamom fruit, fancy, bold, cs lb. 3.95 - —
selected, bleached, cs lb. 3.60 - —
decorticated, Guatemalan, cs lb. 2.10 - —
Guatemalan, cs. lb. 2.10 - —
green, Ceylon, bgs lb. 1.90 - —
seed (see Cardamom fruit decorticated).
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd lb.14.40 - —
smaller lots, dlvd lb.14.50 -15.20
Carotene, tech., 1,350,000 A units per gram, tins, works gram. .48 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units .18 - —
microcrystalline in oil, 400,000 A units per gram, tins, works million units. .30 - —
b-Carotene, tech., pure, crystalline, 1,600,000 A units to 1,670,000 per gram., cns. gram. .40 - —
in vegetable oil, 400,000 A units per gram, cns. gram. .096 - —
Carvol, bots. lb. 4.75 - 9.65
Cascara sagrada bark, bulk lb. .30 - .31
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point lb. .27 - .30
premium, bgs., 10,000-lb. lots or more, shipt. point lb. .35 - .40
imp., Argentine, acid-precip., grd., duty paid, c.l. lb. .23¼ - .23½
New Zealand, same basis lb. .25 - .25½
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J lb. .22 - —
ton lots, same basis lb. .23 - —
dm. lots, same basis lb. .25 - —
Cassia, Batavia, cuttings, bis lb. .15 - —
longstick, cracked, bls lb. .17 - —
shortstick, cracked, bls lb. .16 - —
Saigon, broken, bls lb. No prices.
medium, reconditioned, bls lb. No prices.
thin, bls lb. No prices.
Castor beans, bgs., c. & f ton.110.00 Nom.
Oil (see Oil, castor)
Pomace, bgs., c.l., works ton. No stocks.
Castoreum, nat., cns lb. 5.00 -30.00
syn., cns lb. 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½ - —
resub., dms., works lb. 4.29½ - —
Catnip leaves, Southern, bls lb. .75 - —
Celery seed, French, bgs., shipt. lb. .37 - —
Indian, bgs. lb. .16 - —
Cellulose scrap (see Pyroxylin scrap).
Acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E lb. .35 - .46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E. lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd E lb. .585 - .595
half-second, bgs., dlvd. E. lb. .545 - .555
Cerium hydrate, 74% $CeO_2$, fib. dms., 100-lb. lots or more lb. 1.44 - —
77% $CeO_2$, fib. dms., 100-lb. lots or more lb. 1.74 - —
Oxalate, NF, bbls., bgs., works lb. 1.32 - —
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb. 1.85 - 1.98
smaller lots, dlvd lb. 2.03 - 2.23
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. .85 - —
Roman, cs lb. 1.50 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .26½ - .32¼
smaller lots works lb. .27 - .50
Bone (see Black, bone).
Hardwood, briquets, bgs., c.l., works ton.77.00 -88.00
gran., bgs., works ton.77.00 - —
bulk, c.l., works ton.72.00 - —
Pinewood, gran., powd., bgs., c.l., works, South ton.55.00 - —
l.c.l., works, South ton.55.00 -65.00
lump bgs., c.l., works, South ton.51.50 - —
l.c.l., works, South ton.54.50 -69.00
bulk, c.l., works, South ton.36.00 - —
Chestnut extract, liq., 25% tannin, bbls., c.l., works lb. .04¾ - —
l.c.l., works lb. .0510- —
tanks, works lb. .04 - —
powd., 60% tannin, bgs., extra, c.l., works lb. .1032- —
l.c.l., works lb. .1102- —
Chloral, tech., 94% min., dms., c.l. works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, works lb. .21 - —
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb. 1.00 - —
500-lb. lots lb. 1.03 - —
100-lb. lots or less lb. 1.05 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .66 - —
clarif., dms., c.l., frt. alld lb. .75 - —
l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .76 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .15½ - —
l.c.l., same basis lb. .16½ - —
70%, dms., c.l., same basis lb. .18 - —
l.c.l., same basis lb. .19 - —
Rubber, 5, 10, 20 cps., ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works lb. .65 - —
l.c.l., works lb. .66 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .09½ - —
l.c.l., Metropolitan area lb. .11 - .12¼
tanks, single units, works, frt. equald 100 lbs. 2.93 - —
multiple units, 5 cars, works, frt. equald 100 lbs. 3.80 - 3.83
3 cars, same basis 100 lbs. 3.80 - —
2 cars, same basis 100 lbs. 5.00 - —
1 car, same basis 100 lbs. 6.00 - —
4-Chloro-2-aminotoluene, fused, bbls, lb. 1.45 - —
m-Chloroaniline, dms., c.l., frt. equald lb. .75 - —
l.c.l., same basis lb. .80 - —
o-Chloroaniline, dms., c.l., works, frt. equald lb. .70 - —
l.c.l., same basis lb. .72 - —
p-Chloroaniline, dms., c.l., works, frt. equald lb. .75 - —
o-Chlorobenzaldehyde, dms., works. lb. 1.20 - —
p-Chlorobenzaldehyde, dms., works. lb. 1.33 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald. lb. .34½ - —
l.c.l., same basis lb. .35½ - —
p-Chlorophenol, dms., c.l., frt. equald. lb. .34½ - —
l.c.l., same basis lb. .35½ - —
Chlorophyll, oil soluble, not fixed, 4%, pails, tins, works lb. 4.25 - —
copper fixed, 6½% tins, pails, works lb. 6.25 - —
Sodium-copper, aqueous soln., 4%, dms., pails, works lb. 3.75 - —
8%, pails, dms., works lb. 4.00 - 4.80
14%, dms. works lb. 8.90 - —
conc., dom., 50%, dms., works, 100% basis lb. 42.00 - —
75%, dms. works, 100% basis lb. 45.00 - —
90%-100%, dms., works, 100% basis lb. 45.00 - —
imp., 60%, tins, 100% basis. lb. 58.00 - —
75%, tins, 100% basis lb. 58.00 - —
90%, tins, 100% basis lb. 58.00 - —
Chloropicrin, coml., bots lb. 1.50 - —
cyls., 180 lbs. frt. alld lb. .95 - —
100 lbs., same basis lb. .97 - —
25 lbs., same basis lb. 1.22 - —
Cholesterol, USP, fib. dms., 100-lb. lots lb. 6.85 - 9.00
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.50
Chloride, fib. dms., frt. adjusted. lb. 1.50 - 1.75
Dihydrogen citrate, fib. dms., frt. adjusted lb. 1.50 - 1.75
Chromium acetate, soln. 7½%, bbls., works lb. .08½ - —
cbys. works lb. .10¼ - —
Fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).
Oxide (see Green chromium oxide).
Trioxide NF bots lb. .82 - .89
Yellow (see Yellow chrome).
Cinchona bark, NF, red, broken, bgs. lb. .35 - .40
yellow, broken, bgs lb. .35 - .40
Cinchonidine, cryst., cns., 100-oz. lots. oz. .65 - —
Sulfate, cns., 100-oz. lots oz. .35 - —
Cinchonine, cryst., cns., 100-oz. lots. oz. .52 - .57
Sulfate, NF, cns., 100-oz. lots oz. .27½ - .30½
Cinchophen, NF, heavy density, dms., frt. adjusted lb. 3.70 - 4.05
standard density, dms., same basis lb. 3.50 - 3.85
Cinchophen-sodium, dms., frt. adjusted lb. 4.50 - 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Aldehyde, cns., dms lb. 1.00 - 1.30
Cinnamon, Ceylon, No. 2 lb. .53 - .54
"0000," bgs. lb. .76 - —
Citral, bots., cns lb. 5.90 - 6.15
Citronellal, bots., dms lb. 1.85 - 2.50
Citronellol, bots., dms lb. 4.40 - 5.00
Civet, artif., bots lb.13.75 -15.00
nat., bots oz. 7.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton.19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton.10.00 - —
purif., bgs., c.l. Tenn ton.20.50 - —
imp., airfloated, bgs., c.l., Atl. port long ton.42.00 -45.00
lump, bulk, Atl. port long ton.27.00 -30.20
China, dom., dry-grd., airfloat, 99%, 325 mesh bgs., Georgia, works ton.10.00 - —
l.c.l., Georgia works. ton.15.50 - —
300 mesh, bgs., c.l., Georgia, works ton.13.50 -14.50
l.c.l. ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 - —
l.c.l., ex whse net ton.60.00 -65.00
Clove, Madagascar, bgs lb. .47 - —
Zanzibar, bls lb. .48 - —
CMC, crude, 96%, low or medium vis., bgs., or fib. dms., 23,000 lbs., dlvd. E., 100% basis. lb. .37 - —
less than 23,000 lbs., dlvd. E., 100% basis lb. .41 - —
65%, bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .37 - —
l.c.l., dlvd. E., 100% basis. lb. .41 - —
purif., high vis. (see Gum Cellulose), standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb. .55 - —
smaller lots, same basis lb. .57 - —
CMC prices W. of the Rockies are 2c. per lb. lower, and are on a works basis.
Coaltar, crude, resale for solns., dms., c.l., ex-whse gal. .255 - —
l.c.l., ex-whse gal. .275 - —
tanks, ex works gal. .155 - .159
refd., resale, dms., c.l., ex-whse, gal. .2650- .32
l.c.l., ex-whse gal. .2850- .34
tanks, ex-whse gal. .1650- .1760
Cobalt acetate, 23.7%, bbls., dlvd. lb. 1.30 - —
Carbonate, 46%, powd., bgs., dlvd. lb. 2.15 - —
Chloride, 24.2% Co., kgs., dlvd., lb. 1.20 - —
Hydrate, 60-61% Co, bbls., dlvd. lb. 2.72 - —
Linoleate, fused, 8½% Co., dms. lb. .75¾ - —
liq., 6% Co., dms lb. .61 - —
Metal, 97-99% kgs., ex whse lb. 2.60 - —
Naphthenate, liq., 6% Co., dms., dlvd lb. .48¼ - —
Nitrate, 20.1% Co, bbls., dlvd lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.98 - —
70-71% Co., kgs lb. 1.90 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused, 3% Co., dms lb. .29¼ - —
Sulfate, cryst. 21% Co., dms., dlvd lb. .89 - —
monohydrated, 33% Co., dms. dlvd lb. 1.40 - —
Tallate, 6% Co., dms., dlvd lb. .43¾ - —
Cocaine, USP, cns., 100-oz. lots oz.17.80 - —
Hydrochloride, cns., 100-oz. lots. oz.13.75 - —
Cocillana bark, bgs lb. .40 - .50
Cocoa butter, bgs lb. .63 - .69
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Hydrochloride, cns., 100-oz. lots oz.11.75 - —
Phosphate, USP, cns., 100-oz. lots. oz.10.25 - —
Sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .20 - .22
blue, bls lb. .20 - .22
Colchicine, USP, bots., cns. oz.33.50 -40.00
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .75 - 1.00
Collodion, USP, dms lb. .32½ - —
flexible, USP, dms lb. .34 - —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. No prices.
Condurango bark, bales lb. .40 - .50
Copaiba balsam, cns., dms lb. .90 - 1.20
Copper acetate, bbls., c.l., works lb. .43 - —
l.c.l., works lb. .44 - —
Carbonate, 55%, bgs., works lb. .30 - .31½
Chloride, anhyd., bbls., works lb. .43½ - —
cryst., bbls., works lb. .29 - .29½
Cyanide tech., bbls., 20,000-lb. lots or more lb. .707 - —
1,000-lb. lots or more lb. .717 - —
smaller lots lb. .737 - —
Gluconate, cns., dms lb. 3.00 - 3.24
Hydrate, dms., frt. alld. E. Miss. lb. .45¼ - .45¾
Metal, electrolytic, dlvd., Valley basis lb. .36 - —
Naphthenate, liq., 8% Cu., dms., frt. alld lb. .24 - —
Nitrate, tech., cryst., bbls., works. lb. .32¼ - —
Oleate, solid, 8% Cu, dms., works lb. .45 - —
Oxide, black, bbls., 500-lb. lots or more, works lb. .47½ - .49½
red, 97%, USN Type I, bbls., lb. .53½ - .68
90%, USN Type II, bbls., 500-lb. lots or more, works lb. .48½ - .51½
Oxychloride, dms., works lb. .46 - .56½
Quinolinate, fib. dms lb. 4.25 - 4.50
Resinate, precip., dms., frt. alld lb. .31½ - —
Sulfate, CP, gran., bbls., works. lb. .1915- —
cryst., 99%, bgs., c.l., works. 100 lbs.12.25 - —
l.c.l., works 100 lbs.12.75 -13.25
monohydrated, 35% dms., c.l., works 100 lbs.19.75 - —
l.c.l., works 100 lbs.20.50 - —
tribasic, dealers, bgs., c.l., works, frt. alld 100 lbs.26.25 - —
l.c.l., works 100 lbs.27.25 -28.25
Undecylenate, dms lb. 2.90 - 3.00
Copperas (see Ferrous sulfate).
Copra, Atl. Gulf ports, c.i.f. ton.170.00 - —
Pacific ports, c.i.f. ton.165.00 - —
Coriander seed, Moroccan, bgs., afloat lb. .11½ - .12
Roumanian, bgs. lb. .07 - —
Yugoslavian, bgs. lb. .06 - —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs 7.31 - —
l.c.l. 100 lbs. 7.46 - —
Syrup, 42° dms., c.l. 100 lbs. 7.32 - —
l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric Chloride).
Cortisone acetate, NNR, bulk gram. 3.50 - 3.55
Cottonseed meal, exp. 41%, bgs., Memphis ton.59.00 -60.00
Coumarin, cryst., NF, dms lb. 3.10 - 3.20
Cramp bark, NF, bls lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. cbys. lb. 3.05 - 3.26
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
soln., 80%, tanks, works gal. .2068- —
refd., dms., c.l., works gal. .40 - .42
l.c.l., same basis gal. .50 - .53
tanks, same basis gal. .30 - .33
Wood, beechwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb. 1.30 - 1.35
pinewood, tanks, works lb. .427 - .438
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt equald lb. .148 - —
l.c.l., same basis lb. .151 - —
tanks, same basis lb. .135 - —
USP, non-ret., dms., c.l., same basis lb. .158 - —
l.c.l., same basis lb. .161 - —
ret. dms., c.l., same basis lb. .140 - —
l.c.l., same basis lb. .145 - —
tanks, same basis lb. .145 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .158 - —
l.c.l. lb. .161 - —
tanks lb. .141½ - —
2-97%, 2°C., dms., c.l., frt. equald. lb. .198 - —
l.c.l., same basis lb. .201 - —
tanks, same basis lb. .185 - —
o-Cresol, m.p. over 30°C., ret. dms., c.l., frt. equald lb. .173 - —
l.c.l., same basis lb. .176 - —
tanks, same basis lb. .16 - —
29°C., ret. dms., c.l., frt. equald. lb. .16 - —
l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .15 - —
25-29°C., dms., c.l., frt. equald. lb. .153 - —
l.c.l., same basis lb. .156 - —
tanks, same basis lb. .14 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .49 - —
l.c.l., dlvd lb. .51 - —
Methyl ether, cns lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼ - .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
l.c.l., works 100 lbs.14.25 - —
Insecticide, dealers, bgs., c.l., dlvd 100 lbs.16.75 - —
l.c.l., dlvd 100 lbs.17.75 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .26 - —
l.c.l., works lb. .27 - .27¼
Cubeb berries, XX, NF, bgs lb. .60 - .65
powd., cs lb. .75 - .80
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .12¾ - .13
Turkish, bgs lb. .12¾ - .13
Cutch extract, 50% tannin, bgs., ex dock, duty extra lb. .08½ - —
Cyanamide, fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton.55.00 - —
pulv., 21% N, bgs., works. unit-ton. 2.75 - —
Indust. grade, bgs., c.l., works ton.75.00 - —
l.c.l., bgs., works ton.96.00 - —
6-16 mesh, dms. c.l., works ton.120.00 - —
l.c.l., dms., works ton.140.00 - —
Cyclohexane, 99%, tech., dms., c.l., works gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½ - .37¾
l.c.l., works, same basis lb. .30 - .38¼
tanks, works, same basis lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½ - —
l.c.l., works lb. .35 - —
tanks, works lb. .32 - —

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Pfizer Vitamin A Crystalets are available in potencies of 250,000 units and 500,000 units per gram in fine and medium mesh sizes. Vitamin A and D Crystalets are available in potencies of 500,000 Vitamin A units per gram in combination with either 100,000 or 50,000 Vitamin D units per gram. Other A:D ratios can easily be obtained by blending. And, *in any ratio, the cost of adding Vitamin D is minimal.*

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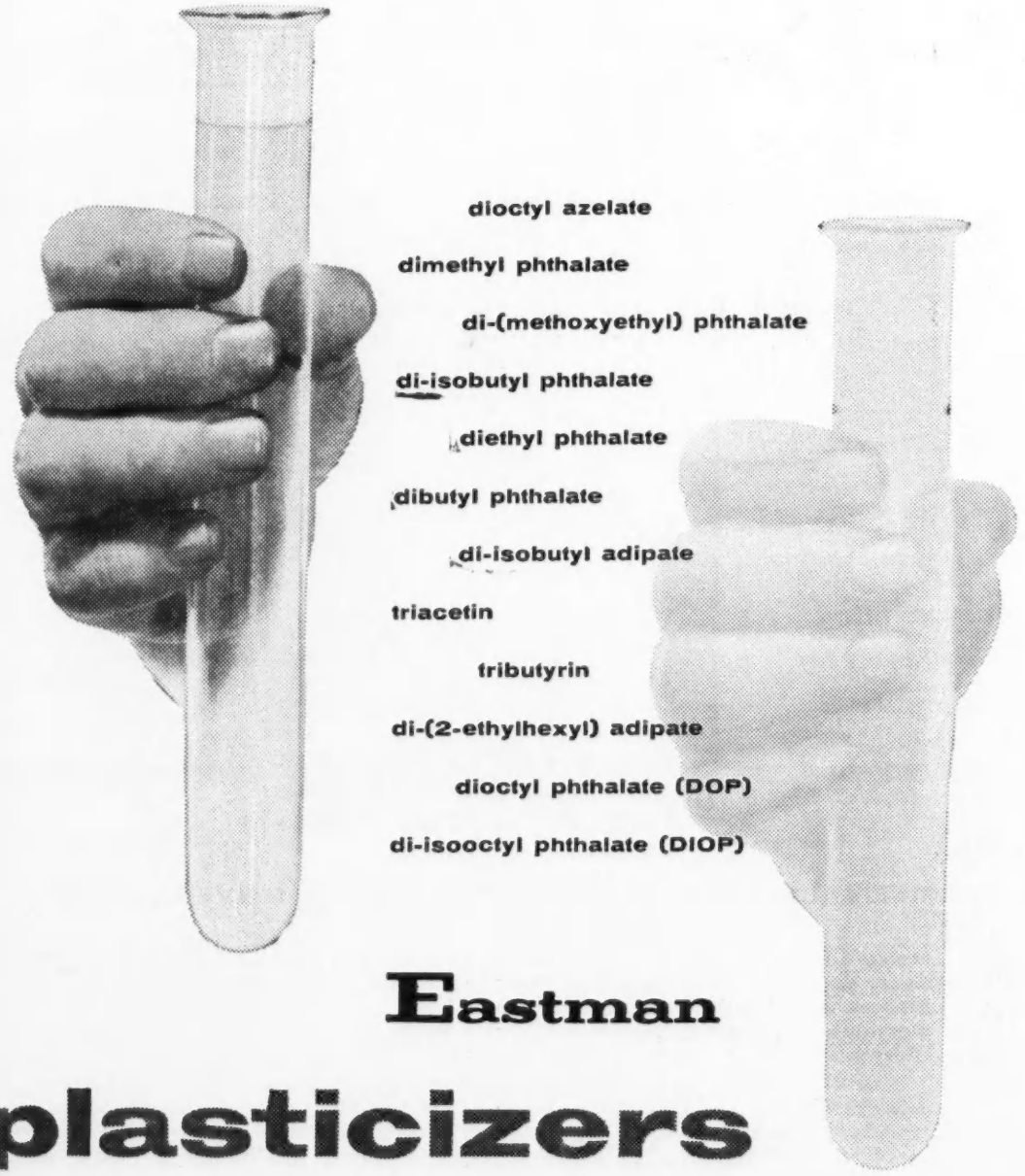
## Cyclohexylamine—Dioctyl Sebacate

Cyclohexylamine, dms., c.l., works. lb. .46½- —
l.c.l., works lb. .47½- —
tanks, works lb. .45 - —
Cyclopropane, CP, 2-lb. cyls., works. cyl.48.00 - —
6 oz. cyls., works cyl.12.00 - —
USP, hospitals, cyls., 40-gal. lots, gal. .33 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

## D

2-4-D, tech., dms., c.l., works, frt. equald lb. .41½- —
l.c.l., same basas lb. .46½- .48½
Butyl ester, dms., c.l., works. lb. .43 - —
l.c.l., same basis lb. 48 - .50
Isopropyl ester, dms., c.l., works. lb. 43 - —
l.c.l., works lb. .48 - .50
Dandelion root, bls lb. .35 .40
DDD, tech., flake, grd., fib. bgs., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt equald lb. .27 - —
smaller lots, same basis lb. .29 - —
fib dms., c.l., same basis lb. .28 - —
smaller lots, same basis lb. .30 - —
1-Decanol, tech., dms., c.l., dlvd lb. 41 - —
l.c.l. dlvd. lb. .43 - —
tanks, dlvd. lb. .38½- —
Deertongue leaves, bls lb. .45 —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton.53.40 - —
14½% P, paper bgs., c.l., t.l., works ton.48.00 - —
17% P, paper bgs., c.l., t.l., works ton.56.00 - —
18% P, paper bgs., c.l., t.l., works ton.69.85 - —
Degras, common, bbls lb. .10 - .12
neutral, less 2% ffa., bbls lb. .23 - .24
over 2% ffa., bbls lb. .22 - .23
d-Desoxyephedrine hydrochloride bots lb.25.00 - —
dl, bots. lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 8.95 - —
l.c.l. 100 lbs. 9.10 - —
canary, paper bgs., c.l. 100 lbs. 8.69 - —
l.c.l. lb. 8.84 - —
dark, paper bgs., c.l. 100 lbs. 8.79 - —
l.c.l. 100 lbs. 8.94 - —
white, paper bgs., c.l. 100 lbs. 8.53 - —
l.c.l. 100 lbs. 8.68 - —
Corn dextrin in cotton bgs. 25c. per 100 lbs. higher.
Potato, bgs lb. .10½- .11
Dextrose, USP, dms. lb. .17¾- —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.50 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¼- —
l.c.l. works lb. .33¼- —
tanks, works lb. .28¼- —
Di-tert-amyl phenol, dms., c.l., works lb. .30¼- —
l.c.l., works lb. .33¼- —
tanks, works lb. .28¼- —
o-Dianisidine, fib. dms lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .90
l.c.l., same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .68 - —
l.c.l., works lb. .68½- .69
tanks, works, dlvd lb. .66 - .66½
Tartrate, dms., works, frt. alld lb. .64 - .71
Dibutylamine, dms., c.l., dlvd lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Di-tert-butyl-p-cresol, dms., c.l., works lb. .91 - —
l.c.l., works lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., works lb. .30½- .31½
l.c.l., same basis lb. .31½- .32½
tanks, same basis lb. .29½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .14½- —
l.c.l., same basis lb. .17 - —
Dichlorodiphenyltrichloroethane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l. works lb. .05¾- —
tanks, works lb. .04¼- —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l., works lb. .51¾- —
tanks, works lb. .49¾- —
Dicyclohexyl phthalate, fib. dms., c.l., frt. alld., works lb. .58¼- .59
l.c.l., same basis lb. .59¼- .60
Dieldrin, dms, frt. alld lb. 1.80 - —
l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .26½- —
l.c.l., same basis lb. .27½- —
tanks, same basis lb. .24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l. same basis lb. .48 - —
tanks same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .67½- —
c.l. dlvd lb. .68½- —
tanks, dlvd lb. .65½- —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l., same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .27 - —
l.c.l. dlvd. lb. .28 - —
tanks, dlvd lb. .25 - —
Sulfate, dms., c.l., works lb. .18¾- —
c.l. works lb. .19¼- —
tanks works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l. same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms. c.l. dlvd E. lb. .17¼- —
l.c.l., same basis lb. .18¼- —
tanks, same basis lb. .15¼- —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., c.l., works lb. .46½- —
l.c.l., works lb. .47 - —
Monobutyl ether, dms., c.l. lb. .28¾- —
l.c.l., dlvd. lb. .29¾- —
tanks, dlvd lb. .27 - —
Acetate, dms., c.l., works lb. .30 - —
l.c.l. works lb. .30½- —
tanks, dlvd. E lb. .28¼- —
Monoethyl ether, dms., c.l., dlvd. lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. .20 - —
Acetate, dms., c.l., works lb. .26¾- —
l.c.l., works lb. .27¼- —
tanks, dlvd. E lb. .25¼- —
Monomethyl ether, dms., c.l., works lb. .20½- —
l.c.l., works lb. .21½- —
tanks, works lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .43 - —
l.c.l., same basis lb. .44 - —
tanks, same basis lb. .41¼- —
Diethylstilbestrol, USP, bots., to kilo lots kilo.100.00 - —
1-kilo lot kilo.110.00 - —
Digitalis leaves, USP, dom., dms., lb .90 - 1.10
Digitoxin, USP, bots. gram. 5.00 - 5.50
Diglycol laurate, dms. lb. .35 - .38
Oleate, dms lb. .31 - —
Stearate, dms lb. .26 - .27
Dihexyl sebacate, dms., c..., works lb. .64 —
l.c.l., works lb. .64½- .65
tanks, works lb. 62 —
Dihydrazine sulfate, dms., works. lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .09 - .10
Sulfate, bulk gram. .09 - .10
2,2-Dihydroxy-5,5'-dichloro-diphenyl-methane, pure, dms lb. 2.80 - 3.00
tech, dms lb. 1.04 - 1.14
Di-isobutyl ketone, dms., c.l., dlvd. lb. .15½- —
l.c.l., dlvd lb. .16½- —
tanks, same basis lb. .13½- —
Phthalate, dms., c.l., dlvd. E lb. .31 - —
l.c.l. same basis lb. .32 - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
l.c.l., dlvd. E lb. .11 - —
tanks, dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .32½- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. .29½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .22¾- —
l.c.l., same basis lb. .23¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs lb. .11 - —
nat., bgs lb. .10 - —
Dimethyl anthranilate, cns. lb. 5.25 - 5.75
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Ethanolamines, anhyd., dms., c.l., dlvd lb. 1.43 - —
l.c.l., dlvd lb. 1.45 - —
tanks, dlvd lb. 1.40 - —
70%, dms., c.l., dlvd., 100% basis lb. .68 - —
tanks, dlvd., 100% basis lb. .66 - —
Hydroquinone, dms. lb. 1.70 - 2.75
Phthalate, dms., c.l., works lb. .29½- —
l.c.l., works lb. .30½- —
tanks, dlvd lb. .27½- —
Sebacate, dms., c.l., works lb. 1.27 - —
l.c.l., works lb. 1.28 - —
tanks, works lb. 1.25 - —
Sulfate, 55-gal., ret. dms., c.l., works lb. .15 - —
l.c.l. works lb. .16 - —
10-gal. ret. dms., l.c.l., works. lb. .16½- —
Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
40% soln., dms., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .29½- —
l.c.l., frt. alld lb. .30½- —
tanks, frt. alld lb. .28½- —
N,N-Dimethylformamide dms., works. lb. .34 - .39
tanks, works lb. .33 - —
2,4-Dinitroaniline, dms., frt. equald lb. .57 - —
m-Dinitrobenzene, 85°C., dms lb. .20 - —
89°C., dms lb. .22 - —
2,4-Dinitrochlorobenzene, dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld E lb. .15¾- —
tanks, frt alld., E lb. .15 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily, dms. lb. .10 - —
refd., 68°C., dms. lb. .21 - —
Dioctyl adipate, dms., c.l., works. lb. .44½- —
l.c.l. works lb. .45½- —
tanks, works lb. .42½- —
Phthalate, dms., c.l., frt. alld lb. .32½- —
l.c.l., frt. alld lb. .33½- —
tanks, frt. alld lb. .30½- —
Sebacate, dms., c.l., works, lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works, dlvd lb. .61 - .61¼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Di-o-tolyguanidine, dms., ton lots, dlvd. lb. .57 - —
smaller lots, dlvd. lb. .58 - —
1,4-Dioxane, dms., c.l., works lb. .28¾ - —
l.c.l., same basis lb. .29¼ - —
tanks, same basis lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works .35 - —
Dipentene, dest-dist., dms., c.l., works gal. .405 - —
l.c.l., works gal. .455 - —
ex-whse gal. .57 - —
steam-dist, dms., c.l., works, South, gal. .64 - —
dlvd, N. Y gal. .82 - —
tanks, works, South gal. .50 - —
Diphenyl, bbls., c.l., works lb. .15 - —
l.c.l., works lb. .16 - —
Diphenyl in bags ¼c. lower.
Oxide, perfume grade, cns lb. .54 - .61
Phthalate, dms., c.l., works lb. .51¾ - —
l.c.l., works lb. .53¾ - —
Diphenylguanidine dms., ton lots lb. .48 - —
smaller lots lb. .49 - .50
Diphenylhydantoin-sodium USP, dms lb. 5.30 - 5.60
Dipropylene glycol, dms., c.l., frt. alld. lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
tanks, same basis lb. .15¼ - —
Monomethyl ether dms., c.l., dlvd. E lb. .20 - —
l.c.l. same basis lb. .21 - —
tanks, same basis lb. .18½ - —
Divi-divi, 45% tannin, bgs., bls., c.l., U S ports, exdock ton 70.00 - 72.00
Divinylbenzene 20-25%, dms., c.l., works lb. .20 - —
l.c.l., works lb. .21 - —
tanks, works lb. .19 - —
40-50%, dms. c.l., works, 100% basis lb. 1.00 - —
l.c.l., works, 100% basis lb. 1.15 - —
Dodecylbenzene, dms., c.l., frt. equald. lb. .14 - —
l.c.l., same basis lb. .15 - —
tanks, same basis lb. .12 - —

Dyes, coaltar, certified colors for food, drugs and cosmetics, 5-lb. and 1-lb. lots, dlvd:—
Blue, FD & C, No. 1, cns lb.17.00 -17.60
No. 2, cns lb.17.00 -17.60
Green, FD & C, No. 1, cns lb.17.00 -17.60
No. 2, cns lb.22.20 -2285
No. 3, cns lb.35.25 -35.90
Orange, FD & C, No. 1, cns lb. 3.65 - 3.75
No. 2, cns lb. 4.65 - 4.75
Red, FD & C, No. 1, cns lb. 7.55 - 7.85
No. 2, cns lb. 4.00 - 4.10
No. 3, cns lb.22.20 -22.85
No. 4, cns lb. 7.20 - 7.50
No. 32, cns lb. 5.30 - 5.40
Violet, FD & C, No. 1, cns lb.17.00 -17.60
Yellow, FD & C, No. 1, cns lb.10.50 -11.05
No. 3, cns lb. 3.30 - 3.40
No. 4, cns lb. 3.30 - 3.40
No. 5 cns lb. 4.00 - 4.10
No. 6, cns lb. 4.00 - 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Black, D&C, No. 1, cns lb.10.95 - —
Brown, D&C, No. 1, cns lb.16.10 - —
Green, D&C, No. 5, cns lb.16.10 - —
No. 6, cns lb.16.10 - —
No. 7, cns lb.14.80 - —
Orange, D&C, No. 3, cns lb.10.95 - —
No. 4, cns lb.20.05 - —
No. 5, cns lb. 5.70 - —
No. 10, cns lb.20.70 - —
Red, D&C, No. 8, cns lb. 2.85 - —
No. 9, cns lb. 2.85 - —
No. 10, cns lb. 2.30 - —
No. 11, cns lb. 1.85 - —
No. 12, cns lb. 2.65 - —
No. 7, cns lb.10.95 - —
No. 13, cns lb.24.00 - —
No. 19, cns lb.15.45 - —
No. 21, cns lb. 3.60 - —
No. 22, cns lb.10.95 - —
No. 28, cns lb.24.65 - —
No. 33, cns lb.17.45 - —
Violet, D&C, No. 2, cns lb.16.10 - —
Yellow, D&C, No. 7, cns lb.10.95 - —
No. 10, cns lb.13.50 - —
No 11, cns lb.13.50 - —

Dyes, coaltar, certified, colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots dlvd:—
Blue, Ext., D&C, No. 1, cns lb.16.10 - —
Green, Ext., D&C, No. 1, cns lb.16.10 - —
Red, Ext., D&C, No. 1, cns lb.13.50 - —
Yellow, Ext., D&C, No. 1, cns lb.10.95 - —

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.
20 Chrysoidine Y, dustless lb. .81 - —
27 Fast light orange 2G lb. .99 - —
31 Phloxine 2G lb. .81 - —
36 Yellow 2G lb. .91 - —
40 Orange R extra, conc lb. 1.17 - —
57 Fuchsine 6B lb. 1.19 - —
79 Scarlet 2R lb. .89 - —
151 Orange AD lb. .61 - —
161 Orange RR lb. .73 - —
176 Fast red A lb. 1.07 - —
179 Rubine XX, conc lb. 1.14 - —
180 Blue F4B lb. 1.01 - —
185 Brilliant scarlet 3RN, conc. lb. .93 - —
202 Chrome blue black, conc lb. .75 - —
203 Chrome black T lb. .86 - —
208 Fast blue SR lb. 1.09 - —
216 Chrome red B lb. .84 - —
234 Brown Y lb. .90 - —
246 Blue black, extra, conc lb. 1.05 - —
275 Milling red 3R, conc lb. 2.03 - —
289 Navy blue 3R, conc lb. 1.31 - —
299 Black F, conc lb. 1.69 - —
304 Neutral black 2B, conc. lb. 2.21 - —
326 Fast scarlet 4BNC lb. 1.64 - —
332 Bismark brown RX, conc. lb. .95 - —
365 Brilliant yellow, conc lb. 2.83 - —
382 Scarlet B lb. 2.00 - —
401 Diazo black BHD lb. .72 - —
406 Blue 2B, extra conc lb. 1.18 - —
419 Red FC, conc lb. 1.12 - —
420 Brown M lb. 1.08 - —
448 Red 4BX, conc lb. 1.30 - —
518 Diamine sky blue FF, extra, conc lb. 1.50 - —
561 Brown B lb. 2.23 - —
581 Black EB, 200% lb. 1.03 - —
593 Green BY, conc lb. .79 - —
596 Yellow Brown K, extra lb. .98 - —
620 Yellow 2G lb. 1.79 - —
640 Yellow XX lb. 1.61 - —
655 Yellow OX lb. 2.04 - —
657 Green V lb. 2.10 - —
662 Brilliant green G lb. 2.79 - —
667 Brilliant milling green 6B, conc lb. 3.68 - —
671 Blue EG lb. 1.70 - —
681 Crystal violet powder lb. 2.15 - —
698 Violet 4BXN lb. 1.74 - —
720 Brilliant blue BBG lb. 1.88 - —
729 Blue B, conc lb. 2.79 - —
749 Red BX lb. 4.33 - —
814 Yellow NN, conc lb. 3.11 - —
841 Safranine GF, extra, conc. lb. 3.17 - —
865 Nigrosine WSJ lb. .75 - —
922 Blue GXX lb. 1.71 - —
978 Black GXCF, conc lb. .32 - —
1034 Alizarine red SC lb. 2.59 - —
1054 Alizarine blue SAPX lb. 2.91 - —
1078 Alizarine green CG, extra. lb. 2.72 - —
1085 Alizarine blue, black, B lb. 2.33 - —
1096 Golden orange GFD, single paste lb. 1.99 - —
1099 Dark blue BO, single paste. lb. 1.75 - —
1101 Jade green N, double paste. lb. 1.98 - —
1106 Blue RS, double paste lb. 3.26 - —
1217 Orange RD, single paste lb. 1.65 - —
1113 Blue BLFD, double paste lb. 2.48 - —
1150 Olive R, single paste lb. 1.10 - —
1151 Brown R, single paste lb. 1.76 - —
1171 Indigo synthetic, 20% paste lb. .31 - —
p-4 Brown PG lb. 2.30 - —
p-14 Brown EB lb. 1.66 - —
p-24 Gray L lb. 1.60 - —
p-80 Diazo brilliant scarlet ROAD lb. 2.79 - —
p-202 Diazo black VJ, conc lb. 1.91 - —
p-244 Brilliant scarlet BN lb. 1.31 - —
p-313 Naphthol SWF lb. 2.42 - —

Dyes, coaltar, for stains, oil-soluble, 100-lb. dms., sellers' works
Black blue No. 550 lb. .81 - —
Jet No. 551 lb. .89 - —
Brown R, conc lb. 1.72 - —
Orange R, brilliant lb. .90 - —
Red 4B, conc lb. 1.37 - —
Yellow C lb. 1.18 - —
FN, conc lb. 1.22 - —

Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works:—
Auramine O lb. 1.35 - —
Black, basic blue lb. 1.21 - —
Jet lb. 1.21 - —
Blue, methylene, 2B, conc lb. 1.71 - —

Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works:—
Brown Bismarck R, conc lb. .86 - —
Chrysoidine, R, extra lb. .60 - —
Y, extra lb. .64 - —
Fuchsine, conc lb. 3.03 - —
Green, malachite, conc lb. 2.10 - —
Rhodamine, B lb. 4.33 - —
Safranine, Y, conc lb. 2.90 - —
Violet, methyl, B lb. 1.10 - —

Dyes, coaltar, for stains, water-soluble, 100-lb. dms., sellers' works:—
Azo rubine R, extra, conc lb. 1.04 - —
Black, acid blue, B, extra lb. .86 - —
Fast light, 3 G, extra lb. 2.04 - —
Methanil, conc lb. .91 - —
Orange acid, Y, conc lb. .47 - —
Scarlet croceine, MOO lb. 1.45 - —
Yellow, azo, conc lb. .90 - —

Oil-soluble, spirit-soluble, water-soluble in kegs, 3c. higher; tins, 10c. higher.

## E

Echinacea root, bls lb 1.10 - —
Egg albumin (see Albumin).
Yolk, dried, dom., bbls lb. 1.08 - 1.10
tanners bbls. lb 06 - 06½
Elm bark, grinding, bls lb. 30 - .32
powd., bbls., bxs lb. .45 - —
select, bundles lb. 75 - —
Emetine hydrochloride, USP, bots oz 32.95 - 35.00
Endrin, tech., dms., dlvd., basis 100% lb 3.75 - —

## Di-o-tolyguanidine—Ethyl Acetate, Syn.

Ephedrine, syn., USP, anhyd., bots. 100-oz lots oz. .93 - 1.00
hydrous, bots., 100-oz. lots oz. .92 - —
Hydrochloride, tins, 100-oz. lots, oz. 75 - —
Sulfate, cryst, tins, 100-oz. lots, oz. 72 - —
powd., tins, 100-oz lots oz. 73 - —
Epichlorohydrin, dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .36 - —
tanks, dlvd lb. .33 - —
Epinephrine, syn. USP, bots., 100-gram lots gram. .45 - .55
Epsom salt (see Magnesium sulfate)
Ergosterol, unirradiated, cryst kilo. 150.00 - —
Ergot, N.F., dms., tin-lined lb 3.00 - —
Eserine salicylate, bots oz. 35.75 - —
Sulfate, bots oz. 39.50 - —
Ether (see specific product)
Ethyl acetate, nat. ferment., 85-88%, dms., c.l., frt. alld lb. .13 - —
l.c.l., frt. alld lb. .14 - —
tanks, frt. alld lb. .11 - —
95-98%, dms., c.l., frt. alld. lb. .13¼ - —
l.c.l., frt. alld lb. .14¼ - —
tanks, frt. alld lb. .11¼ - —
99%, dms., c.l., frt. alld lb. .13½ - —
l.c.l., frt. alld lb. .14½ - —
tanks, frt. alld lb. .11½ - —
syn., 85-88%, dms., c.l., dlvd lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
95-98%, dms., c.l., dlvd lb. .13¼ - —
l.c.l., dlvd. lb. .14¼ - —
tanks, dlvd. lb. .11¼ - —
99%, dms., c.l., dlvd lb. .13½ - —
l.c.l., dlvd lb. .14½ - —
tanks, dlvd. lb. .11½ - —


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### Ethyl Acetoacetate—Glue, Hide

Ethyl acetoacetate, dms., c.l., dlvd. lb. .58 - —
l.c.l., dlvd lb. .59 - —
tanks, dlvd lb. .56 - —
Acrylate dms., c.l., t.l., dlvd lb. .41½- —
t.t.l., dlvd. lb. .41½- —
tanks, dlvd lb. .38¾- —
Aminobenzoate, USP (see Benzocaine).
Bromide, tech., 98%, dms., c.l., frt. alld. E lb. .41 - —
t.c.l., frt. alld E lb. .43 - —
Butyl ketone, dms., c.l., works lb. .35½- —
t.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Butyrate, works lb. .80 1.02
Carbamate (see Urethane).
Cellulose vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. 70 - —
smaller lots, works lb. 72 - 80
vis. 10, 20, 50, 100, 150 cps., ogs., 2,000-lb. lots or more, works lb. .65 - 70
smaller lots, works lb. 67 - 81
Chloride tech., cyl., works lb. 20 - .22
dms., works lb. 18 - 20
tanks, works lb. 10 - —
Cinnamate, cns lb. 2.71 - 3.45
Ethanolamines, mixed, dms., c.l., frt. alld, E. Miss lb. .42½- —
t.c.l., same basis lb. .43½- —
tanks, same basis lb. .40½- —
indust., dms., c.l., dlvd. E lb. .12 - —
t.c.l. dlvd. E lb. .13 - —
tanks, dlvd. E lb. .10 - —
Ether, absolute, ACS, dms lb. .27 - —
anesthesia, USP, hospitals, 1-lb. cns lb. .89 - —
½-lb. cns lb .97 - —
¼-lb. cns lb. 1.05 - —

Ethyl, anesthesia, indust., c.l., dlvd. E lb. .12 - —
l.c.l., dlvd. E. lb. .13 - —
tanks, dlvd. E. lb. .10 - —
Gallate, dms., 100 to 2,000-lb. lots. lb. 3.90 - 4.40
Iodide, cbys., works lb. 3.30 - —
Methacrylate, dms., c.l., and less than truckload, works, frt. equald. lb. .51½- .52
Morphine hydrochloride, USP, bots oz. 11.85 - —
Nitrite (see Nitrous ether).
Oenanthate, dms. lb 1.00 1.50
Oleate, dms. l.c.l., works lb. No prices.
Oxalate (see Diethyl oxalate).
Silicate dist. (see Tetraethylorthosilicate).
40% available $SiO_2$, dms., c.l., dlvd lb. .52 - —
l.c.l., dlvd. lb. .53½- —
tanks, dlvd. lb. .50 - —
N-Ethyl-a-naphthylamine dms. works lb. 1.02 - —
N-Ethyl-o-toluidine, bbls lb. .88 - —
Ethylamine (see Mono Di- or Tri-)
N-Ethylaniline, dms. c.l. frt. alld. lb. .51 - —
l.c.l. frt alld lb. .52 - —
tanks, frt alld lb. .50 - —
Ethylbenzene, 99%, dms., c.l. lb. .19½- .20¼
l.c.l. lb. .20½- .21¼
tanks lb. .18¼- —
Ethylene dichloride, dms., c.l., dlvd lb. .10¼- —
l.c.l. same basis lb. .12¼- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies 1c per lb higher.

Ethylene glycol, indust., dms., c.l., dlvd. E lb. .15½- —
l.c.l., same basis lb. .16½- —
tanks, same basis lb. .13½- —
Monobutyl ether, dms., c.l., dlvd. E lb. .21½- —
l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .19½- —
Monoethyl ether, dms., c.l., dlvd. E lb. .20½- —
l.c.l., dlvd. E lb. .21½- —
tanks, dlvd. E lb. .18½- —
Acetate, dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd. E lb. .19½- —
tanks, dlvd. E lb. .16½- —
Monomethyl ether dms., c.l., dlvd. E lb. .20½- —
l.c.l., dlvd. E lb. .21½- —
tanks, dlvd. E lb. .18½- —
Acetate, dms., c.l., dlvd. E lb. .28¾- —
l.c.l., dlvd. E lb. .29¼- —
tanks, dlvd. E lb. .27 - —
Monostearate, triple pressed, dms lb. .34 - —
Oxide, dms., c.l., dlvd. E lb. .21½- —
l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —
Trichloride (see Trichloroethane).
Ethylenediamine 85-88% dms., c.l., dlvd. E., 100% basis lb. .46 - —
l.c.l., dlvd. E., 100% basis lb. .47 - —
tanks, dlvd. E., 100% basis lb. .44 - —
Ethylvanillin, cns., 25-lb lots lb. 6.75 - 7.30
smaller lots lb 7.35 - 7.40
Eucalyptol, USP, cns., dms lb. 1.40 - 1.50
Eugenol, USP, bots. lb. 2.20 - 3.25
Euphorbia herb, bls lb. .15 - .17

### F

Feldspar, 140-200 mesh, bulk, c.l., works ton 19.50 - —
Feldspar in bags $3 per ton higher
Fennel seed, Argentine, bgs. lb. .17 - —
Czech, medium, bgs lb. .11 - —
Indian, light, bgs lb. .12 - —
Fenugreek seed, Moroccan, bgs. lb. .09 - .09½
Ferric acetate, liquor, 28° bbls., c.l., works lb. .09 - —
l.c.l., works lb. .09¾- —
soln., USP IX, cbys lb. .16 - —
dms. lb. .17 - —
Cacodylate, NF, bots lb 13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 6.75 - —
l.c.l., works 100 lbs 8.00 —
indust. cryst. bbls., c.l., works. 100 lbs. 4.75 5.25
l.c.l., works 100 lbs. 5.75 6.25
42° Be. chys., c.l., works. 100 lbs. 7.25 8.25
tanks, frt. equald, 100% basis 100 lbs. 3.25 —
USP cryst., dms. works lb ½- .09
Citrate, gran., dms. lb. .86 —
Glycerophosphate NF powd lb 4.75 4.85
Hydrophosphite, NF, dms lb 3.45 —
Naphthenate liq., 6% Fe., dms., frt. alld lb. .25¾- —
Oxalate, gran., dms. lb. .85 .87
Phosphate, NF soluble, gran., pearls c.l. lb. .64 .65
Pyrophosphate, NF VII, soluble, gran., pearls, dms lb. .78 .81
Resinate, 6¾% Fe, dms., frt. alld. lb. .29½- —
Stearate, dms., c.l., frt. alld lb. .37 - —
l.c.l., frt. alld lb. .38 .42
Sulfate, partially hydrated, bgs., c.l. works ton 31.75 -33.75
l.c.l. works ton 34.75 -40.75
Ferric-ammonium citrate, brown, NF, gran., dms lb. .56 - .59
green, USP XII, gran., dms lb. .56 - .59
Oxalate, fine gran., dms lb. .25½- .28½
Ferric-potassium oxalate fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28½
Ferrous gluconate, NF, dms lb. .88 - —
Sulfate, gran., bgs., c.l. works. ton 34.50 - —
l.c.l., dlvd. Metropolitan area 100 lbs 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP cryst., bbls, dms lb .09½ .10
Fir balsam, Canada, cns gal. 32.00 - —
Oregon, bbls gal. 4.00 - —
Fishliver oil (see Oil fishliver)
Fishmeal, dom., menhaden, 60% protein grd., bgs., Balto. area. ton. 136.00 - —
Fishscrap, menhaden, dried, 60% protein, bgs., Balto area ton. 136.00 Nom.
Formaldehyde, NF, 37%, (inhibited), methanol, Zone 1, dms., c.l., dlvd lb. .0625- .0675
l.c.l., works lb. .072 - .0725
tanks, dlvd lb. .0375- .04
Zone 2, 12-15% methanol, dms., c.l., dlvd lb. .071 - —
tanks, dlvd lb. .043 - —
methanol-free (uninhibited), Zone 1, tanks, dlvd lb. .035 - .0375
Zone 2, tanks, dlvd lb. .04 - —
Fleaseed (see Psyllium seed).
Fringetree bark, bls lb 60 - .61
Fuller's earth, bgs., c.l., Ill. mines. ton. 19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ton. 17.50 - —
calcined, bgs., c.l., same basis ton. 20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton. 16.50-17.00
200-mesh, bgs., c.l., same basis ton 17.50 -18.00
spent, bgs., c.l., shipt. point ton. 4.50 - 5.00
Furfural, dms., c.l., works lb. .13 - —
l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .12 - —
dlvd. W lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .20 - —
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls., c.l. lb. .45½- —
No. 3, bbls l.c.l lb. .43½- —
liq., No. 1, bbls., l.c.l. lb. .22½- —
No. 2, bbls. c.l. lb. .21½- —
No. 3, bbls. l.c.l lb. .19 - —
solid, No. 1, bxs., l.c.l. lb. .45 - —

### G

G salt, 100% basis, bbls. frt alld lb. .73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbl., c.l. lb. .53 - —
150 Bloom test, bbl., c.l. lb. .64 - —
200 Bloom test, bbl., c.l. lb. .71 - —
225 Bloom test, bbl., c.l. lb. .74 - —
275 Bloom test, bbl., c.l. lb. .91 - —
Gelsemium root, bls lb. .23 - .24
Gentian root, bls lb. .17 - .20
grd., bbls., bxs lb. .22 - .23
powd., bbls., bxs lb. .23 - .24
Geraniol, extra, cns., dms lb. 3.90 - —
standard, cns., dms lb. 3.65 - —
Geranyl acetate, cns lb. 3.90 - —
Ginger oleoresin, NF, from African root, bots lb. 4.00 - 7.75
from Jamaican root, bots lb. 6.00 -10.25
Root, African, bls lb. .34 - —
Jamaica, No. 1, bgs lb. No prices.
No. 2, bgs. lb. .45 - —
No. 3, bgs. lb. .44 - —
Nigerian, split, bgs lb. .30 - —
Glauber's salt, anhyd (see Sodium sulfate).
Glue, bone, extracted, 86 jellygrams, bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
packers' 40 jellygrams, bgs., c.l., dlvd lb. .14 - —
65 jellygrams, same basis lb. .14½- —
86 jellygrams, same basis lb. .15 - —
115 jellygrams, same basis lb. .15½- —
135 jellygrams, same basis lb. .18½- —
164 jellygrams, same basis lb. .19½- —
renderers' 115 jellygrams, bgs., c.l., dlvd lb. .15 - —
Bone glue, t.c.l. prices 1c higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .15 - —
95-121, bgs., c.l., dlvd lb. .16 - —
122-149, bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206 jellygrams, bgs., c.l., dlvd lb. .23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-293, bgs., c.l., dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362, bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .39 - —
461-494, bgs., c.l., dlvd lb. 40 - —
495-529, bgs., c.l., dvld lb. 41 - —
Hide glue t.c.l. prices 1c higher.


*Briefs*

*from Recent Literature*

**Ethylene Oxide**

**Organic esters,** useful as detergents and where slight acidity is desired without corrosive attack upon metals, as in metal pickling baths and in the removal of milkstone from dairy equipment, are prepared using lower alkyl-, carboxymethyl-, diethers of polyoxyalkylene glycols as intermediates.

**Anti-foaming agent,** effective for aqueous media in pressure boilers operating at 200 p. s. i. and above, is a diether reaction product of straight-chain 1:12 octadecanediol and ethylene oxide, in a 1:18-25 molar ratio, in the presence of an alkaline catalyst.

**Regenerated cellulose films and sheets** are given excellent slip characteristics and prevented from sticking together, even under pressure and elevated temperatures, by impregnation in the gel state with an ethylene oxide-stearic acid condensation product in combination with glycerol and colloidal silica.

**Wetting and emulsifying** properties are exhibited by hydroxy esters of long chain phosphonic acid, prepared by heating n-octadecane phosphonic acid and ethylene oxide in an autoclave in the presence of aluminum hydrosilicate as catalyst.

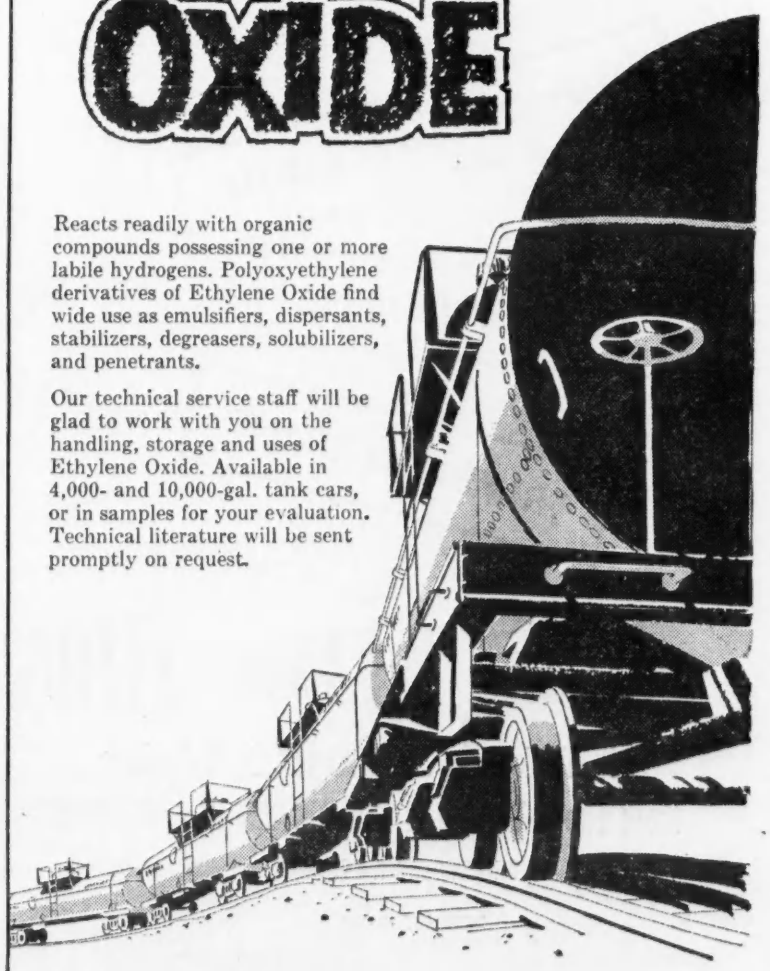
**Water-in-oil type petroleum emulsion breakers** are prepared by the oxyalkylation of certain phenol aldehyde resins, particularly those derived from a phenol having an ortho or para hydrocarbon substituent having 14 carbon atoms. Such products are also useful as wetting, detergent and leveling agents.

*These developments are abstracted from recent publications or U. S. patents. They may suggest applications of Ethylene Oxide in your products or processes. Permission to practice inventions covered by unexpired patents can be given only by the owners thereof.*

*Jefferson's products are offered with the understanding that the user will make his own tests to determine their suitability for his purposes.*

JEFFERSON

ETHYLENE OXIDE



Reacts readily with organic compounds possessing one or more labile hydrogens. Polyoxyethylene derivatives of Ethylene Oxide find wide use as emulsifiers, dispersants, stabilizers, degreasers, solubilizers, and penetrants.

Our technical service staff will be glad to work with you on the handling, storage and uses of Ethylene Oxide. Available in 4,000- and 10,000-gal. tank cars, or in samples for your evaluation. Technical literature will be sent promptly on request.

*Essential Chemicals from Hydrocarbon Sources*

*Jefferson*

CHEMICAL COMPANY, INC.

260 Madison Avenue, New York 16, N. Y.

Branch Sales Offices: Chicago, Houston, Charlotte

West Coast Sales Agent: Nelson A. Howard, Jr., Los Angeles

Plant: Port Neches, Texas

Other Stock Points: Chicago, Houston and Charlotte, Port Reading and Tenafly, New Jersey

Ethylene Oxide, Glycols, Dichloride
Ethanolamines
Nonyl Phenol
Morpholine
Ethylene, Propylene and Glycerine Carbonates
Polyethylene Glycols

Glycerine, nat., crude, saponification, 88%, to refineries, tanks, works..lb. .23 - .23½
soapive, 80%, tanks, works lb .21 Nom.
refd., BP, 98%, dms., c.l., dlvd. lb. .30½- —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd ..... lb. .30 - —
dynamite, dms., c.l., dlvd lb. .30½- —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd ..... lb. .30 - —
high gravity, dms., c.l., dlvd.lb. .30½- —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd ..... lb. .30 - —
USP, CP, 95%, dms., c.l., dlvd. lb. .29½- —
l.c.l., dlvd..... lb. .30 - —
tanks, dlvd..... lb. .29 - —
yellow, distilled, dms., c.l., dlvd. lb. .30 - —
l.c.l., dlvd ..... lb. .30½- —
syn., dms., c.l., dlvd.....lb. .30½- —
l.c.l., dlvd.....lb. .31 - —
tanks, dlvd.....lb. .30 - —

Glycine (see Acid aminoacetic).

Glycerol (see Glycerine).

Glyoxal, 30%, dms., c.l., works lb. .18½- —
l.c.l., works.....lb. .19 - —
tanks, works.....lb. .18 - —

Golden seal root, NF, tested, bls. lb. 2.25 - 2.50
powd., bxs ..... lb. 2.75 - 3.25

Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
crystalline, 88-90%, powd., bgs., fib, dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib, dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib, dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib, dms., ex whse lb. .29 - .31
No. 2, 90-95%, bgs., fib, dms., ex whse lb. .29 - .31

Grease, brown, tanks, dlvd..... lb. .05¼ Nom.
house, tanks, dlvd ..... lb. .06⅛- Nom.
white, choice, not all hog, tanks, dlvd..lb. .07¾- —
yellow, tanks, dlvd.....lb. .06½- —

Green, brilliant, thioflavin, toner, molybdated, PMA, kgs, works. lb. 5.10 - —
tungstated, PTMA, kgs., works lb 6.20 - —

Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .38 - —
16-30%, bbls., same basis lb. .39 - —
31-45%, bbls., same basis. lb. .40 - —
45-49%, bbls., same basis. lb. .43 - —
50%, bbls. same basis lb. .48 - —
reduced color, 25%, bbls., same basis lb. .19 - —

Chrome green prices are ½c. higher, dlvd., at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Chromium oxide, hydrated, bbls., dms., c.l., frt. alld. lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld....lb. .39¾- —
l.c.l., same basis.....lb. .40¼- —

Dyes (see Dyes, coaltar).

Malachite, straight, PTMA, bbls., works lb. 4.60 - —

Paris (see Paris green).

Phthalocyanine toner, bbls., works. lb. 3.95 - —
resinated, bbls .....lb. 3.50 - —
water dispersable, bbls....lb. 1.71 - —

Pigment B, kegs.....lb. 1.35 - —
paste, kegs .....lb. .38 - —

Grindelia robusta herb, bls.....lb. .38 - .40

Guaiacol, NF, cryst., dms., tins. lb. 2.10 - 2.15
liq., cbys., dms .....lb. 2.30 - 2.40
Carbonate, NF VII, dms.....lb. 3.40 - 3.45

Gum, aloe (see Aloe).
Arabic, amber, sorts, bgs.....lb. .22 - .23
powd., USP, bbls.....lb. .27 - .28

Asafetida (see A).

Asphaltum (see A).

Benzoin, Sumatra, cs..... lb. .38 - .42

Camphor (see C).

Cellulose, high vis., bgs., 23,000-lb. lots or more, works, frt. alld. lb. .55 - —
smaller lots, same basis....lb. .57 - —

Copal, Congo, No. 1, bgs.....lb. .21 - .23
No. 2, bgs.....lb. .18½- .20
No. 3, bgs.....lb. .16½- .18
Manila C, bgs.....lb. .42 - .44
CBB, bgs.....lb. .37 Nom.
DBB, bgs.....lb. .33 - .35
DK, bgs.....lb. No Stocks
dust, bgs.....lb. .14 - .16
MA, soft, bgs.....lb. .23 - .25
WS, bgs.....lb. .34 - .36
Philippine, pale, chips, bgs. lb. .24 - .26
nubs, bgs.....lb. .34 - .36
seeds, bgs.....lb. .20 - .22
sorts, bgs .....lb. .22 - —
Pontianak, chips, bgs.....lb. .28 - —
nubs bgs .....lb. .39 - .40

Dammar, Batavia, A/E, cs. ....lb. .27 - .29
dust, bgs.....lb. .16½- .17½
E, bgs .....lb. .20 - .22
East India, batu, bold, bgs....lb. .14 - .15½
nubs and chips, bgs.....lb. .08 - .09
black, bold, bgs.....lb. .14 - .16
unscraped, bgs.....lb. .11 - .13
nubs and chips, ogs....lb. .11 - .13
pale chips, bgs.....lb. .13½- .14½
nubs, bgs.....lb. .18 - .20
Siam, cs. .....lb. .37 - —
Singapore, No. 1, bgs.....lb. .43 - .45
No. 2, bbls.....lb. .27 - .29
No. 3, bbls .....lb. No stocks.
dust, bgs .....lb. .16½- .17
seeds, bgs.....lb. .20 - .22

Ester, gum-rosin type, dms., c.l., dlvd, Ill., Ind., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va lb. .15½- —
wood-rosin type, dms., c.l., same basis lb. .15 - —

Guar, food grade, bgs., l.c.l....lb. .40 - .50
tech. grade, bgs., l.c.l.....lb. .32 - —

Karaya, No. 1, NF, powd., bbls. lb. .55 - —
No. 2, powd., bbls. .....lb. .45 - —
No. 3, powd., bbls .....lb. .40 - —

Locust bean, powd., bgs.....lb. .28 - .30

Myrrh, cs. .....lb. .38 - .40

Opium (see O).

Olibanum siftings, cs..... lb. .15 - .20
tears, cs. ..... lb. .22 .30

Rosin (see Naval Stores, Protective Coatings Market).

Sterculia (see Gum Karaya).

Tragacanth, No. 1, ribbons, cs lb. 3.00 - 3.50
No. 2, cs .....lb. 2.55 - 2.60
No. 3, cs .....lb. 1.75 - 1.90
powdered, USP, bbls.....lb. 1.25 - 1.35

Gypsum, plaster of paris, 100-lb. paper, bgs., trucks, dlvd. N. Y. C. ton.20.30 - —
terra alba., dom., paper bgs., same basis..ton.19.00 - —
works, N. Y. C.....ton.16.00 - —
imp. English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse.....ton.60.00 -62.00

## H

Hawthorn berries, bgs. ..... lb. .28 - .32
Heliotropin, cryst., cns..... lb. 3.50 - 4.25
Helonias root, bls..... lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l. lb. .47 - —
No. 2, bbls., l.c.l. lb. .43 - —
No. 3, bbls., l.c.l..... lb. .41 - —
No. 4, bbls., l.c.l. ..... lb. .39 - —
No 5, bbls., l.c.l..... lb. .37 - —
paste, No. 1, bbls. l.c.l..... lb. .20½- —
Henbane leaves, bls ..... lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex..... gal. .14¾- —
Borger, Tex..... gal. .14¾- —
Hesperidin methylphalcone, bots., works lb.50.00 - —
Hexachlorophene, dms ..... lb. 2.60 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .222 - —
1,000-19,999-lb. lots, same basis lb. .232 - —
smaller lots, same basis....lb. .242 - —

Hexamethylenetetramine, tech., fib. dms., 1,000-lb. lots or more, same basis..lb. .239 - —
smaller lots, same basis.... lb. .249 - —
USP, dms., 500-lb. lots or more, same basis lb. .40½- —
smaller lots, same basis lb. .41½- —
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex..... gal. .15½- —
Borger, Tex ..... gal. .15½- —
1-Hexanol, dms., c.l., works ..... lb. .34½- —
l.c.l., works ..... lb. .35 - —
tanks, works ..... lb. .33 - —
Hexyl cinnamic aldehyde, dms. lb. 4.00 - 7.50
Salicylate, dms ..... lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd. lb. .16 - —
l.c.l., dlvd ..... lb. .17 - —
tanks, dlvd ..... lb. .14 - —
n-Hexyl methacrylate, dms., less than truckload works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb.14.00 - —
smaller lots, dlvd ..... lb.14.50 - —
Histamine diphosphate, USP, bots. kilo.400.00 - —
l-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works. kilo 80.00 -85.00
1-5 kilo lots, works... kilo.90.00 -95.00
Homatropine hydrobromide, USP, bots oz. 5.50 - —
Methylbromide, USP, bots .. oz. 5.65 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.50 - —
Horehound herb, bls.....lb. .16 - .19
Hydrastine bots ..... oz.29.50 -31.00
Hydrochloride, NF, bots .... oz.29.50 -31.00
Sulfate, bots..... oz.35.00 -37.00

### Glycerine—Hypernic Extract

Hydrastinine, 10-grain bots..... bot. 1.95 - —
Hydrastis (see Goldenseal).
Hydrazine, free base, ret. dms., Lake Charles, La lb. 3.00 3.30
Hydrate, 100%, ret. dms., Lake Charles, La lb. 1.60 1.90
85%, ret. dms., same basis lb 1.35 1.55
Hydrocortisone acetate, bulk, bots., dms gram. 6.00 - —
Alcohol, bulk, bots., dms gram. 6.00 - —
Hydrofuramide, dms., fib. ctns., works lb .30 .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
t.c.l., works ..... lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E lb. .30½- .32½
dlvd. W ..... lb. .39 - —
tanks, works ..... lb. .21 - —
Peroxide, USP, bbls, dlvd..... lb. .03¾- .05
35%, dms., c.l., dlvd..... lb. .202 - —
l.c.l. dlvd. ..... lb. .211 - —
tanks, dlvd. ..... lb. .1800- —
Hydraquinone, photo grade, bbls., dms lb. .96 - 1.00
tech., dms., c.l., dlvd..... lb. 77½- —
l.c.l. same basis..... lb. 79½- —
Hydroxycitronellal, cns ..... lb. 5.10 6.00
Hyoscine salts (see Scopolamine).
Hyoscyamine, bots ..... oz.15.75 -16.00
Hydrobromide, bots ..... oz.11.00 -12.00
Sulfate, bots ..... oz.10.50 -11.50
Hypernic extract, cryst., No. 2, bbls., l.c.l. lb. .52 - —
liq., No. 1, bbls., l.c.l..... lb. .35 - —
No. 2, bbls., l.c.l..... lb. .27 - —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**Ichthammol—Magnesia**

## I

Ichthammol, NF dms ... lb .60 - .75
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP bots ... lb 17.00 - 21.00
Inositol, bots., dlvd ... lb 5.00 - —
tins, dlvd ... lb 4.50 - 4.75
Insect flowers (see Pyrethrum)
Iodine, crude, kgs ... lb 1.45 - —
resub., USP, dms., jars ... lb. 2.30 - 2.32
Iodochlorohydroxyquinolin, USP, dms lb 5.90 - —
Iodoform, NF, dms., kgs ... lb 4.90 - 5.00
a-Ionone, cns. ... lb. 5.70 - 6.00
b-Ionone, cs. ... lb. 6.00 - 7.70
Methyl (see under M)
Ipecac root, bgs ... lb. 9.00 - —
powd., bbls., bxs ... lb.10.00 - 10.25
Irish moss, bleached, prime, bls lb .30 - .35
Iron Compounds (see Ferric or Ferrous).
Isoborneol, cns ... lb. 1.25 - 1.70
Isobornyl acetate, cns ... lb. .82 - .95
formate, dms. ... lb. .80 - —
Propionate, dms ... lb 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade dms., c.l. dlvd E. of Rockies lb. .13¼- —
l.c.l., same basis ... lb. .14¼- —
tanks, same basis ... lb. .11¼- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
l.c.l., dlvd ... lb. .28½- —
tech., dms., c.l., dlvd ... lb. .21½- —
l.c.l., dlvd ... lb. .22½- —
tanks, dlvd ... lb. .19½- —
Isoeugenol, cns ... lb. 4.40 - 4.75
Isoniazid, powd., bulk, 25-kilo lots or more kilo.23.00 - 25.50
smaller lots ... kilo.24.00 - 26.00
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .13½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works ... lb. .24¼- —
l.c.l., works ... lb. .24¾- —
tanks, works ... lb .22½- —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .12 - —
l.c.l., same basis ... lb. .13 - —
tanks, same basis ... lb. .10 - —
Alcohol (see Alcohol, isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd ... lb. .07 - —
l.c.l. dlvd ... lb. .08 - —
tanks, dlvd ... lb .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, 70% CIPC in xylol, dms., c.l., t.l., works lb. .70 - —
l.c.l., works ... lb. .714 - .814
Isopropyl-N-phenyl carbamate, 450-lb. fib dms., c.l., t.l., works. lb. .75 - —
l.c.l., works ... lb. .80 - .90
Isopropylamine (see Mono, Di. or Tri-).
Isoquinoline, dms., works ... lb. .85 - 1.25

## J

Jalap root, NF, bls ... lb. .38 - .55
powd., bbls., bxs ... lb. .49 - .66
Juniper berries, bgs ... lb. .18 - .20
Tar, NF, dms ... lb. .42 - .60

## K

Kaolin (see also Clay China).
NF, powd., fib. dms. ... lb. .10 - .12
colloidal, fib., dms. ... lb. .15½- .17½
Kola nuts, bgs ... lb. .15 - —

## L

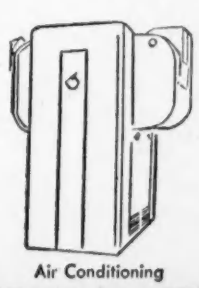
Lactose, crude, bgs., c.l., works lb. .15 - —
edible, fib. dms., 30,000-lb. lots, works lb. .22 - —
2,000-lb. lots, works ... lb. .22¾- —
200-1,800-lb. lots, works ... lb. .23¼- —
Edible lactose in bgs. lc. lower.
fermentation grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, works lb. .24 - —
2,000-lb lots, works ... lb. .24¾- —
200-1,800-lb. lots, works ... lb. .25¼- —
USP lactose in bgs., lc. lower.
Lady's slipper root, bls ... lb. 1.70 - 1.75
Lanolin, cosmetic, dms., works lb. .28 - .30
USP, anhyd., dms., works ... lb. .26 - .28
hydrous, dms., works ... lb. .25 - .27
Lard, cash, dms., Chicago ... lb. .12475- —
Larkspur seed, bgs ... lb. .20 - .23
Laurel leaves, Greek, bls ... lb. .12½- .13
Portuguese, bls ... lb. .12 - —
Turkish, bls ... lb. .23 - —
n-Laurel methacrylate, dms., c.l., or t.l., works ... lb. .65½- —
Lavender flowers, medium, bls ... lb. .55 - .60
ord., bls ... lb. .16 - .20
select., bls ... lb. .90 - —
Lead acetate, white, cryst., bbls. lb. .22 - —
gran., bbls ... lb. .23 - —
powd., bbls ... lb. .23 - —
NF, cryst., gran., powd ... lb. .31 - .32
Lead arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more ... lb. .27½- —
t.c.l., frt. alld ... lb. .28½- —
1-lb. bgs., c.l. ... lb. .43½- —
t.c.l. ... lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld ... lb. .15¾- —
t.c.l., same basis ... lb. .16¾- —
Carbonate (see Lead, white).
Chloride, dms. ... lb. .45 - —
Iodide, NF, V jars ... lb. 3.82 - —
Linoleate, fused, 26%% Pb, dms. lb. .33 - —
Metal, pigs, prime, N. Y. ... lb. .15 - —
St. Louis ... lb. .1480- —
Metallic paste, dms., 20,000-40,000-lb. lots ... lb. .33¾- —
10,000-20,000-lb. lots, same basis lb. .34¾- —
200-2,000-lb. lots, same basis. lb. .35¾- —
Prices ex wnse. Jersey City, N. J., 4½c. per lb. higher.
Monosilicate, bgs., c.l., works, frt. equald ... lb. .1580- —
t.c.l., same basis ... lb. .1630- —
Naphthenate, liq., 16% Pb, dms., dlvd ... lb. .17 - —
24% Pb., dms., dlvd ... lb. .21 - —
solid, 37% Pb., dms., dlvd ... lb. .27½- —
Nitrate, bbls ... lb. .22¼- —
Orthosilicate-silica gel, 50-60% PbO, dms., works ... lb. .29¾- .34¾
Peroxide, tech., powd., bbls ... lb. .38¾- .43¾
Phthalate, dibasic, dms., works. lb. .41 - —
Red, 95% $Pb_3O_4$, or less bbls., l.c.l., same basis ... lb. .18 - —
97% $Pb_3O_4$, bbls., c.l., same basis lb. .17¾- —
l.c.l., same basis ... lb. .18 - —
98% $Pb_3O_4$, bbls., c.l., same basis lb. .18 - —
t.c.l., same basis ... lb. .18½- —
Resinate, precip., 23% Pb, dms., dlvd lb. .32½- —
Salicylate, normal, dms., works lb. .46 - —
Sulfate (see Lead, blue, basic sulfate, Lead, white, basic sulfate).
Tallate, liquid, 16% Pb., dms. lb. .15 - —
24% Pb., dms ... lb. .18½- —
solid, 30% ... lb. .23¼- —
White, basic carbonate, bgs., c.l., shipt. point, frt. alld. lb. .17½- —
l.c.l., same basis ... lb. .18½- —
silicate, bgs., c.l., shipt. point, frt. alld. lb. .16 - .19¼
l.c.l., same basis ... lb. .17 - .20¼
sulfate, bgs., c.l., shipt. point, frt. alld. lb. .15¾- —
l.c.l., same basis ... lb. .16¾- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb. .15 - .17
t.c.l., same basis ... lb. .15½- .17¼
unbleached, non-ret., dms., c.l., same basis lb. .13 - .15
l.c.l., same basis ... lb. .14½- .16¼
dl-Leucine, dms., works ... lb.12.25 - 15.00
Licorice root, whole, bbls ... lb. .10 - .12
gran., bbls ... lb. .15 - .17
powd., bbls ... lb. .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
t.c.l., works ... lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan, N. Y. destination, freight equalized with nearest producing point ton.18.71 - —
Hydrated, bulk, c.l., same basis. ton.20.21 - —
Spray, bulk, c.l., same basis ton.23.21 - —
Lime salts (see Calcium).
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 6.40 - 7.65
ex lignaloe wood oil, dms ... lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms ... lb. 6.15 - 7.95
96-98%, dms ... lb. 6.75 - 7.15
ex petitgrain, bots. ... lb. 5.95 - 6.70
Lindane, 25% formulation, dealers, dms., works lb. 1.58 - —
99%, tech., dealers, dms., dlvd., lb. 3.10 - —
Linden flowers with leaves, bls lb. .30 - —
without leaves, bls ... lb. .35 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills ... ton.59.00 - —
extracted, 36%, bulk, same basis. ton.56.00 - 56.50
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .16½- —
l.c.l., same basis ... lb. .17 - —
Lithium benzoate dms ... lb. 1.65 - 1.67
Bromide, NF, dms., works, frt. equald lb. 2.16 - —
Carbonate, NF, dms., c.l., t.l., dlvd ... lb. 1.29½- —
ton lots to t.l., dlvd ... lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld., works lb. .85 - 1.12¼
l.c.l., same basis ... lb. .90 - 1.13¼
Chloride, CP, anhyd., ton lots lb. 1.28½- —
tech., cryst., dms., c.l., t.l., dlvd., frt. alld., works lb. 1.05 - 1.10¼
l.c.l., same basis ... lb. 1.10 - 1.25
Citrate, NF, dms. ... lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb. 2.17½- —
ton lots, dlvd ... lb. 2.18½- —
less ton lots, dlvd ... lb. 2.23½- —
Hydride, powd., dms., works lb.14.00 - —
Hydroxide, monohydrate, dms., c.l., t.l., dlvd., frt. alld., works lb. .90 - .90¼
l.c.l., same basis ... lb. .91½- .96
Manganite, dms., works ... lb. .95 - 1.15
Nitrate, tech., dms., 100-lb. lots lb. 1.25 - —
Salicylate, dms ... lb. 1.60 - 1.70
Silicate, dms., works ... lb. 1.10 - 1.30
Sulfate, dms., 100-lb. lots ... lb. 1.45 - —
Titanate, dms., works ... lb. 1.15 - 1.35
Lithopone, ord., bgs., c.l., dlvd. lb. .07½- —
t.c.l., dlvd. ... lb. .08¼- .08¼
titanated (high-strength), bgs., c.l., dlvd. lb. .10 - —
t.c.l., dlvd ... lb. .11 - —
Lithopone prices, Pacific Coast, 1c. per lb. higher.
Lobelia herb, bls ... lb. 1.25 Nom.
Lobeline sulfate, bots., works oz..29.50 - 33.50
Logwood extract, cryst., No. 1, bbls., t.c.l. ... lb. .41 - —
No. 2, bbls., t.c.l ... lb. .39 - —
liq., No. 1, bbls., t.c.l ... lb. .20 - —
No. 2, bbls., t.c.l ... lb. .19 - —
No. 3, bbls., t.c.l ... lb. .18½- —
solid, No. 1, t.c.l ... lb. .35 - —
Lycopodium, cs. ... lb. 2.00 - 2.25
dl-Lysine hydrochloride, bots ... kilo.140.00 - 150.00

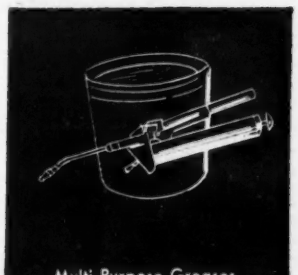
## M

Mace, Siauw, siftings, bls ... lb. 1.38 - 1.50
West Indian, No. 1, bls. ... lb. 1.45 - 1.50
Magnesia, calcined, tech., bgs., ctns., works lb. .25¼- .26
Syn. rubber grade, light, bgs., c.l., works ... lb. .29¼- —
t.c.l., works ... lb. .30 - —
extra light, works ... lb. .29¼- .30
USP, light, ctns ... lb. .35 - .36
heavy, bbls ... lb. .45 - .52

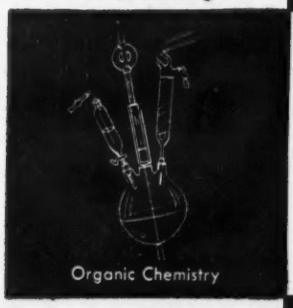

*From air conditioning to welding fluxes . . .*

# LITHIUM CHEMICALS SERVE INDUSTRY!

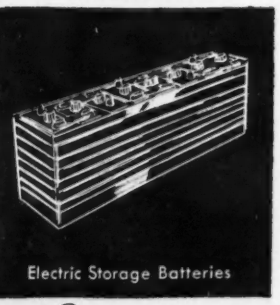

Air Conditioning

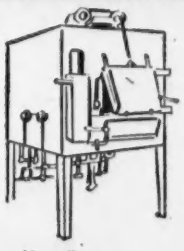

Multi-Purpose Greases

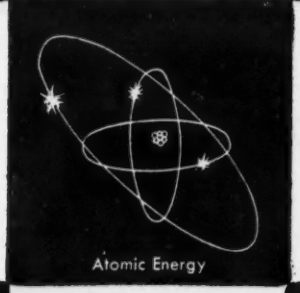
Porcelain Enamel


Organic Chemistry

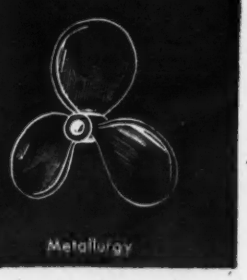
Pharmaceuticals

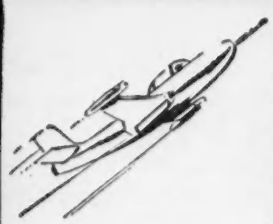

Electric Storage Batteries


Heat Treating


Atomic Energy

Glazes—Electronic Ceramics


Metallurgy


Brazing Fluxes

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CHEMICAL PLANTS: St. Louis Park, Minnesota • Bessemer City, North Carolina • RESEARCH LABORATORY: St. Louis Park, Minnesota

Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewalah, Wash ton 38.00 - —
Magnesium bromide, jars lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½- —
t.c.l., frt. equald lb. .12 - .13
truckloads, frt. equald lb. .11 - —
USP, bgs., c.l., frt. equald lb. .12½- —
t.l., frt. equald lb. .13 - —
t.c.l. frt equald lb. .14 - .15

Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points

Chloride, anhyd., 92% flake or pebble, dms., c.l., works, lb. .12¾- —
t.c.l., same basis lb. .14 - 15
hydrous, 99% flake bgs., c.l., works ton 50.00 - —
t.c.l., bgs ton 55.00 - 105.00
Gluconate, dms., cns lb. 1.30 - 1.37
Glycerophosphate, dms., works lb 5.40 - 5.50
Hydroxide, NF, medicinal, bbls., dms., kgs lb. .23½- .30
Metal, 99.8% ingots, cs., works lb. .28½- .297
sticks cs. works frt alld. on carlots lb. .49 - —
Oxide (see Magnesia, calcined)
Peroxide, 15%, dms., works lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc).
Silicofluoride, bbls, works lb. .09 - .10
Sulfate, tech., bgs., c.l., works, 100 lbs. 2.15 - —
t.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l. 5,000 lbs., 1 w/drawal 100 lbs. 3.10 - —
smaller lots 100 lbs. 3.35 - —
Trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb lots lb. .40 - —
100-lb lots lb. .45 - —

Bulky and super grades of magnesium trisilicate, 7c. per lb. higher

Malathion, dms., c.l., works lb. .94 - —
t.c.l., works lb. .96 - .98
Maleic anhydride, dms., c.l., dlvd, E lb. .27 - —
t.c.l., dlvd E lb. .28 - —
tanks, same basis lb. .26 - —

Prices on maleic anhydride W. of Rockies, 1½c. higher.

Mandrake root, bls lb. .38 - —
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech., fib. dms lb. .25 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works, lb. .25½- —
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works ton 91.50 - —
paper bgs., works ton 88.00 - —
dms., works ton 94.00 - —

Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.

Gluconate, dms lb. 1.79 - 1.93
Glycerophosphate, NF, fib dms lb. 4.70 - 4.80
Hydrate, bbls., dlvd lb. .26 - —
Hypophosphite, NF, dms lb. 3.52 - —
Linoleate, liq., 4.5% Mn., dms, lb. .22½- —
solid, precip. 8.2% Mn, bbls lb. .37½- —
Naphthenate, liq., 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn, dms, lb. .24 - —
precip., 6½-7% Mn, dms lb. .28 - —
Sulfate, fertilizer grade, 65% bgs., c.l., dlvd, S. E ton 80.50 - —
t.c.l., dlvd, S. E ton 87.50 - —
Tallate, 6% dms lb. .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton 71.00 - —
So. American 30% tannin, c.l., tannin, c.l., ex dock ton 71.00 - —
Mannitol, coml., fib. dms., c.l., works lb. .60 - —
single dm., works lb. .65 - —
ton-lots, works lb. .62 - —
MBT (see 2-Mercaptobenzothiazole).
MBTS (see Mercaptobenzothiazyl disulfide).
Melamine, bgs., ton lots, works lb. .33 - —
500 to 2,000-lb. lots, works lb. .33½- —
smaller lots, works lb. .38½- —
Menadione, USP, bots. gram. .044 - .05
Menthol, nat., USP, Brazilian, cs. lb. 9.00 - —
syn., USP, racemic, cas lb. 5.45 - —
Menthyl salicylate, tins lb. 4.00 - 4.25
2-Mercaptobenzothiazole, bgs., fib. dms. ton lots, works, frt. alld lb. .38 - —
less ton lots, same basis lb. .40 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .48 - —
less ton lots, same basis lb. .50 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 - —
gran or powd., dms., 50-lb. lots or more lb. 4.73 - —
Cyanide, NF VIII, powd., fib. dms, lb. 6.04 - —
Iodide, red, NF, fib. dms lb. 7.72 - —
Oxide, red, NF, powd., fib. dms, lb. 5.90 - 6.01
yellow, tech. (see Yellow, mercury oxide).
USP, fib. dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP).
Metal, 76 lb., per flask, net flask 288.00 - —
Mesityl oxide, dms., c.l., dlvd lb. .1350- —
t.c.l., dlvd. lb. .1450- —
tanks, dlvd. lb. .1150- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Choloraniline)
Metanitroaniline (see m-Nitroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt, alld gal. .70 - —

Prices on natural methanol w. of Miss., 3c. higher.

syn., Zone 1, dms., c.l., dlvd., or truckload min., frt. alld. gal. .45 - —
t.c.l., same basis gal. .51 - —
tankwagon, 2,000-4,000-gal. lots, dlvd. Metropolitan areas, gal. .33 - —
tanks, 4,000 gal., min., frt. alld., or dlvd. gal. .30 - —
4,000 gal., min., works, Carteret, Camden, N. J. gal. .27½- —
Zone 2, dms., c.l., or truckload min., frt. alld. or dlvd. gal. .48 - —
t.c.l., same basis gal. .54 - —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas. gal. .36 - —

Methanol, syn., Zone 2, tanks, 4,000 gal. min., frt. alld. or dlvd. gal. .33 - —

Synthetic methanol zones are:—Zone 1 is all continental U. S. E of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries, comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld, 50-lb or more lb. 3.50 - —
feed grade, 98%, fib dms., same basis lb. 2.65 - —
Methoxychlor 50% wettable powder, dealers dms cs frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms. c.l., dlvd. zone 1 to. .20½- —
t.c.l. same basis lb. .21 —
hydrogenated, non-ret., dms., c.l., dlvd. Zone 1 lb. .21 - —
t.c.l. same basis lb. 21½ —

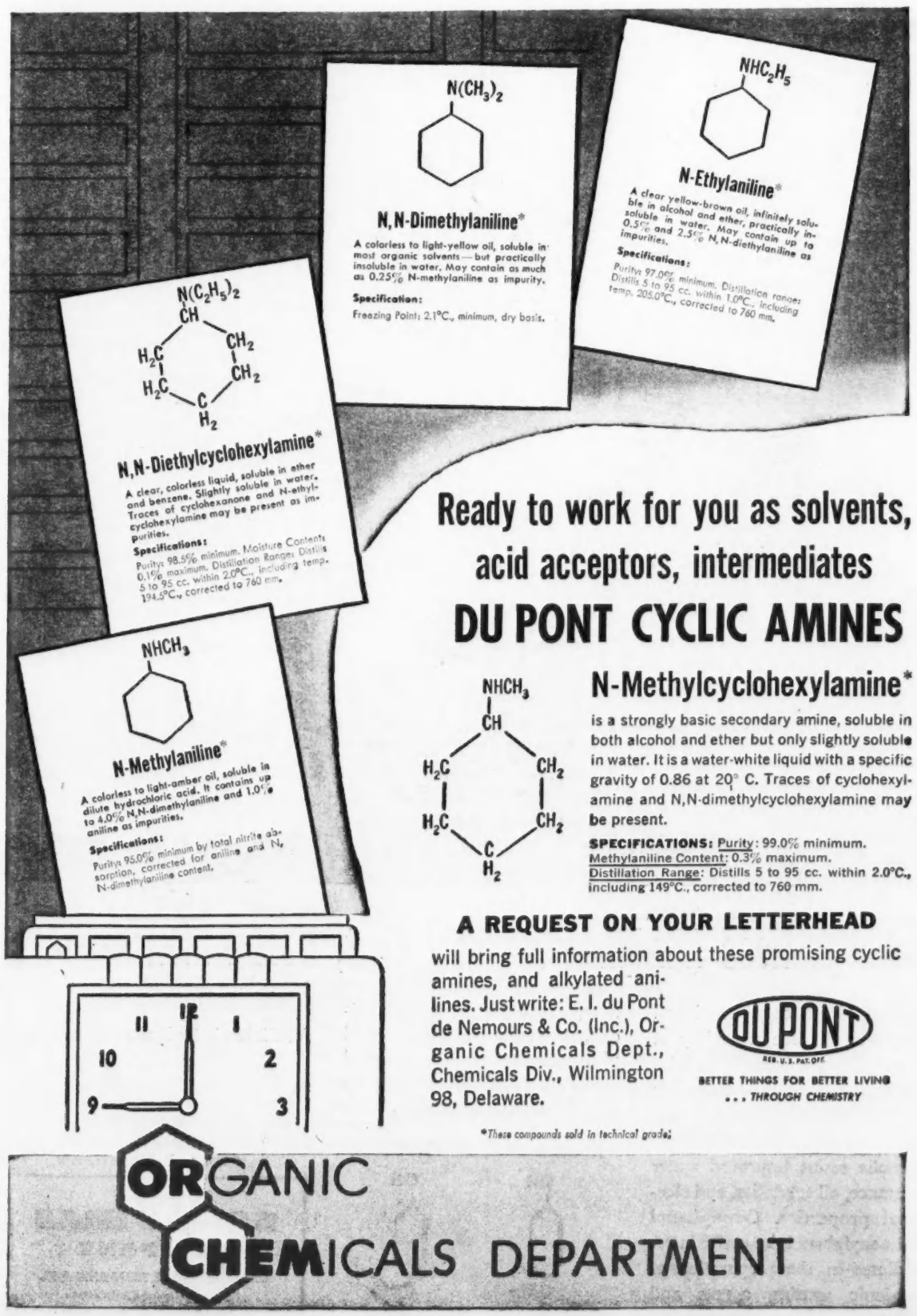
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Acetone, nat., dms., t.c.l., E. of Miss., frt. alld gal. .62½- —
syn. dms., c.l., frt alld E gal. .57 - —
t.c.l., frt alld E gal. .63 - —
tanks, frt. alld. E gal. .45 - —

Synthetic methyl acetone E. territory in all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Acrylate, dms., c.l., t.l., dlvd. lb. .43½- —
t.l., dlvd. lb. .44½- —
tanks, dlvd lb. .41¾- —
Alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd, E lb. .15 - —
t.c.l., dlvd, E lb. .16 - —
tanks, dlvd, E lb. .13 - —
Ketone, dms., works lb. 1.05 - —
Anthranilate, cns. lb. 2.59 - 2.65
Benzoate, cns., dms lb. .53 - .65
Bromide, jobbers, cyls., various sizes, frt. alld, E lb. .47 - .61
Cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works, lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt alld. on 100 lbs lb. .89 - 1.00
standard vis., 15,400 cps., 50-lb., c.l., alld lb. .66 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt alld. on 100 lbs lb. .75 - .85
Chloride indust., cyls. frt. equald, lb. .21 - —
tanks, multi-unit, same basis lb. .15 - —
single unit, same basis lb. .11½- —
refrigerator mfrs., cyls., dlvd. lb. .45 - —
other consumers or service men, cyls., dlvd lb. .62 - —
Cinnamate, cns. lb. 1.43 - 1.80
Cyclohexanol, dms., c.l., works, lb. .35½- —
t.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Ethyl ketone, dms., c.l., dlvd, lb. .13 - —
t.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
Formate, refd., dms. lb. .35 - .40
tech. non-ret. dms. any quantity, works lb. .10 - —

Methyl heptin carbonate, bots. lb. 33.00 - 42.00
p-Hydroxybenzoate, fib dms lb 1.90 - 2.00
Ionone, standard, cns., dms lb. 5.70 - 6.00
Isobutyl carbinol, dms., c.l., dlvd. lb. .15 - —
t.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
Ketone, dms., c.l., dlvd lb. .15 - —
t.c.l., dlvd. lb. .16 - —
tanks, dlvd. lb. .13 - —
Methacrylate, dms., c.l., t.l. frt. equald with Belle, W. V. lb. .36½- —
smaller lots, same basis lb. .37 - —
tanks, same basis lb. .35 - —
Naphthyl ketone, cryst., cns lb 3.60 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Roseaniline chloride, NF fib. dms., 5-lb. lots, lb. 5.64 - —
Salicylate, USP, cns., 500-lb. lots lb. .53 - —
Testosterone USP, 100-gram bots. gram. .68 - —
2-Methylbenzylamine, dms., t.c.l., works lb. 1.25 - —
2-Methyl-5-ethyl pyridine dms., c.l., works lb. 47½- —
t.c.l., works lb. .48 - —
tanks, works lb. 46 —
Methylene blue, fib. dms., 100-lb. lots frt. adjusted lb 3.25 - 3.60
smaller lots same basis lb 3.40 - 3.60
Chloride, tech., dms., c.l., dlvd, E lb. .13½- —
t.c.l., same basis lb. .14½- —
tanks, same basis lb. .12½- —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 - —
Methylparaben (see Methyl p-hydroxybenzoate).



N(CH3)2
N,N-Dimethylaniline*
A colorless to light-yellow oil, soluble in most organic solvents—but practically insoluble in water. May contain as much as 0.25% N-methylaniline as impurity.
Specification:
Freezing Point: 2.1°C., minimum, dry basis.
NHC2H5
N-Ethylaniline*
A clear yellow-brown oil, infinitely soluble in alcohol and ether, practically insoluble in water. May contain up to 0.5% and 2.5% N,N-diethylaniline as impurities.
Specifications:
Purity 97.0% minimum. Distillation ranges: Distills 5 to 95 cc. within 1.0°C., including temp. 205.0°C., corrected to 760 mm.
N(C2H5)2
N,N-Diethylcyclohexylamine*
A clear, colorless liquid, soluble in ether and benzene. Slightly soluble in water. Traces of cyclohexanone and N-ethylcyclohexylamine may be present as impurities.
Specifications:
Purity: 98.5% minimum. Moisture Content: 0.1% maximum. Distillation Range: Distills 5 to 95 cc. within 2.0°C., including temp. 194.5°C., corrected to 760 mm.
NHCH3
N-Methylaniline*
A colorless to light-amber oil, soluble in dilute hydrochloric acid. It contains up to 4.0% N,N-dimethylaniline and 1.0% aniline as impurities.
Specifications:
Purity 95.0% minimum by total nitrite absorption, corrected for aniline and N,N-dimethylaniline content.

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N-Methylcyclohexylamine*

is a strongly basic secondary amine, soluble in both alcohol and ether but only slightly soluble in water. It is a water-white liquid with a specific gravity of 0.86 at 20° C. Traces of cyclohexylamine and N,N-dimethylcyclohexylamine may be present.

SPECIFICATIONS: Purity: 99.0% minimum. Methylaniline Content: 0.3% maximum. Distillation Range: Distills 5 to 95 cc. within 2.0°C., including 149°C., corrected to 760 mm.

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ORGANIC CHEMICALS DEPARTMENT

## Methylpentanediol—Oil, Almond

Methylpentanediol (see Hexyleneglycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 - .04
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¼- —
t.c.l., ex-whse or frt. alld. E lb. .07 - —
paint or lacq., bgs., c.l., works, frt. alld lb. .07¾- —
t.c.l., ex whse or frt. alld. E lb. .08½- —
rubber, bgs. c.l. works, frt. alld. E lb. .07½- —
t.c.l., ex-whse or frt. alld. E lb. .08½- —
wallpaper, bgs. c.l., works, frt. alld., E lb. .07¾- —
t.c.l. ex-whse or frt. alld. E lb. .08¼- —
white, extra, fine, bgs., c.l., works, frt. alld. E lb. .07¾- —
t.c.l., ex-whse or frt. alld. E lb. .08½- —
Mica, wet-grd. W. of Miss R. ½c. higher, W of Rockies, 1c. higher
Milk powder, non-fat, roller, bgs., c.l. lb. .12 - .1535
spray, bgs., c.l. lb. .14 - .1610
whole, roller, bgs. c.l. lb. No prices,
spray, bgs. c.l lb. .27 - .31
Sugar (see Lactose).
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .10 - .10½
New York gal. .12 - —
Molybdenum (metal), powd., 80 or 200 mesh, ctns., works kilo. 8.80 - —
Trioxide, pure, kgs., works lb. 1.05 - —
tech., kgs., works, basis Mo. content lb. 1.25 - —
Monobutylamine, dms., c.l., f.o.b. Rockies lb. .55 - —
t.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10 - —
t.c.l., same basis lb. .11 - —
tanks, same basis lb. .08½- —
Monoethanolamine, dms., c.l. dlvd. E lb. .27 - —
t.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd E lb. .33 - —
t.c.l. dlvd. E lb. .34 - —
tanks, dlvd. E lb. 31 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylortnotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27 - —
t.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, dms. c.l., dlvd. lb. .30¼- —
t.c.l., same basis lb. .31¼- —
tanks, same basis lb. .28½- —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald. 100% basis, lb. .40 - —
t.c.l., frt. equald. 100% basis. .40½- —
tanks, frt. equald. 100% basis. lb. .31 - —
Monoethylamine, 40% soln., dms., c.l., frt. equald. 100% basis lb. .37 - —
t.c.l., frt. equald, 100% basis. lb. .37½- —
tanks, frt. equald., 100% basis. lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Morphine, cns oz. 12.40 -12.60
Acetate, anhyd., cns oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 - 9.95
Hydrochloride, NF, cns oz. 9.90 - 9.95
Sulfate, USP, cns oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .54¾- —
t.c.l. dlvd. E lb. .55¾- —
tanks, dlvd. E lb. .52¾- —
Musk, syn., ambrette, 100-lb. lots, fib. dms lb. 5.15 - —
25-lb lots, cns lb. 5.20 - —
5-lb. lots, cns lb. 5.30 - —
ketone, 100-lb. lots, fib. dms. lb. 5.30 - —
25-lb lots cns lb 5.35 - —
5-lb. lots, cns lb. 5.45 - —
xylol, 100-lb. lots, fib. dms lb. 1.40 - —
25-lb lots, cns lb. 1.45 - —
5-lb. lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb. .12 - .12½
Dutch, yellow, bgs lb. No prices.
English, yellow, bgs lb. .12½ 14
Montana, oriental, bgs. lb. No prices.
yellow, bgs. lb. .12½ .13
Myrobalans, J-1, assorted, bgs., ex dock ton. 66.00 - —
crushed, bgs., ex dock ton. 78.00 -80.00
Bombay, bgs., ex dock ton. 60.00 - —
extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .07¾- —

## N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S).
Naphthalene, crude, dom., 74° tanks, frt. equald lb. .05½- —
78°, bgs., c.l., same basis lb. .06¾- —
t.c.l., same basis lb. .07 - —
tanks, same basis lb. .06¼- —
imp., 78°, large lots lb. .06¾ Nom.
refd., dms., indust., chipped or crushed, bgs., frt. equald. lb. .11½- —
flake, bgs., same basis lb. .12½- —
tanks, same basis lb. .10¾- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .13¾- —
cs., 50 lbs., c.l., same basis lb. .14 - —
1-lb pkgs. c.l., same basis lb. .16¼- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., bbls., c.l., works. lb. .34½- —
t.c.l., works lb. .36½- —
Benzoate, fib. dms., works lb. 3.00 - —
custom contract, works lb. 1.65 - —
Salicylate, dms lb 5.00 - —
Sulfate, cns lb. 35.00 - —
a-Naphthylamine, bbls., frt. alld lb 50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin, fib. dms., 100-kilo lots, basis, activity gram. .60 - —
1-kilo lots, basis, activity gram. 1.20 - —
Nerolin, cns lb. 2.45 - 2.65
Niacin (see Acid, nicotinic)
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .77 - .90½
Carbonate bbls., dlvd. lb. .73¾- .81¾
Chloride, bbls., dlvd lb. .38½- .46½
Formate, bbls., ton lots, frt. alld. lb. .68 - .69
Metal, electro cathodes, cs., works. lb. .64½- —
Nitrate, bbls., works lb. .37 - .38
Oxide, black, bbls lb. .76 - —
green, bbls. lb. .76 - —
Sulfate, bgs., c.l., dlvd. lb. .30¼- —
t.c.l., dlvd lb. .31¼- .38¼
Nicotinamide, USP, dms., frt. adjusted kilo. 12.00 -12.30
Hydrochloride, dms., frt. adjusted. kilo. 11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 - —
Niger seed, bgs. lb. .10½- .11
Nikethamide, cbys lb. 5.00 - —
m-Nitroaniline, dms., frt. alld lb. 1.05 - —
o-Nitroaniline, flaked, dms lb. .54 - .57
powd., dms lb. .60 - —
p-Nitroaniline, dms., t.c.l., frt. alld, lb. .51½- —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .12 - —
t.c.l., frt. alld lb. .13 - —
tanks, frt. alld lb. .11 - —
o-Nitrobiphenyl, tech., dms., c.l., works lb. .14½- —
t.c.l., works lb. .15 - —
tanks, works lb. .13 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15 20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
t.c.l., same basis lb. .35 - .37
13-25 cps., bbls., c.l., same basis lb. .36 - —
t.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
t.c.l., same basis lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, sec., bbls., c.l., same basis lb. .41 - —
t.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
t.c.l., same basis lb. .41 - .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l. lb. .20 - —
t.c.l., same basis lb. .21 - —
tanks, same basis lb. .18 - —
p-Nitrochlorobenzene, dms lb. .26 - .27
2-Nitro-4-chlorophenol, dms lb. .75 - —
Nitroethane, dms., dlvd. E of Rockies lb. .25 - —
Nitrogen solution, 37%N, tanks, frt. equald., per ton of product basis ton. 46.50 - —
40.8%N, tanks, same basis ton. 51.15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.10 - 5.10
Sewage sludge, bulk, works unit-ton. 2.75 + .50
Nitromethane, dms., t.c.l., dlvd E. of Rockies lb. .25 - —
a-Nitronaphthalene, bbls, frt. alld. lb. .41 - —
Nitropropane 1, dms., dlvd. E. of Rockies lb. .23¼- —
2, dms., dlvd. E. of Rockies lb. .25 - —
tanks, works lb. .22¾- —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., works, frt. equald lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .10 - —
t.c.l., frt. alld lb. .11 - —
tanks, frt. alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - .36
m-Nitro-p-toluidine, dms lb. 1.59 - —
Nitrous ether, conc., bots 100-lb. lots lb. 1.28 - 1.35
Nonyl phenol, dms., c.l., frt. alld. lb. .26 - —
t.c.l., frt. alld lb. .27 - —
tanks, frt. alld lb. .24 - —
Nutgalls, Aleppo, bgs lb. .36 - .38
Chinese, bgs. lb. No prices.
Nutmeg, East Indian, bgs lb. .45 - —
West Indian, bgs lb. .38 - .39
Nux vomica, bls lb. .10 - .12
powd., bbls., bxs lb. .15 - .17

## O

Octane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd. lb. .35 - —
t.c.l., dlvd lb. .37 - —
tanks dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .23¼- —
t.c.l., works lb. .23¾- —
tanks, works lb. .22½- —
Drum prices for octyl phenol are 1c. higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies, siberica, cns lb. 3.00 - 3.50
Almond, artif., bitter (see Benzaldehyde).
nat., bitter, F.P.A., bots lb. 3.00 - 3.75
NF, bots lb. 3.25 - 3.75
sweet, USP, dms., cns lb. .65 - .80

# Rohm & Haas Alkylphenols—Low Cost, Useful Intermediates

Rohm & Haas octylphenol and nonylphenol serve a variety of useful purposes. They react with aldehydes to yield phenolic resins; used in small quantities with other phenols, they impart to phenolic resins improved water resistance, oil solubility, and electrical properties. Octylphenol and nonylphenol are useful intermediates in the preparation of non-ionic wetting agents and emulsifiers, detergent, oil-additives, fungicides, rubber chemicals, corrosion inhibitors, and pharmaceuticals. Octylphenol stabilizes ethylcellulose against deterioration by ultraviolet light.

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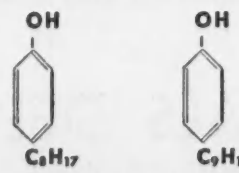


$C_8H_{17}$ OCTYLPHENOL $C_9H_{19}$ NONYLPHENOL

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*Representatives in principal foreign countries*

Oil, allspice (see Oil, pimento).
Amyris, dms. lb. 1.40 - 1.95
Angelica root, bots. lb.66.00 -100.00
seed, bots lb.56.00 -95 00
Aniline (see A).
Anise, USP, dms. lb. 3.25 - 3.75
Apricot, kernel, USP, dms. lb. .38 - .45
Avocado, cns. lb. 3.25 - —
Babassu, crude, tanks lb. .15¼- —
Bay, NF, Puerto Rican, 50-55%, cns lb. 1.85 - 2.20
55-60%, cns. lb. 2.10 - 2.50
West Indian, 50-55%, cns., dms., lb. 1.85 - 2.40
Bergamot, nat., NF, Italian, cns. lb. 9.25 -11.00
Birchtar, crude, cns. lb. 1.50 - 1.90
rectified, NF, cns. lb. 1.75 - —
Bois de rose, Brazil, dms. lb. 4.70 - 5.50
Mexican (see Oil lignaloe wood).
Bone, dms., works lb. .65 - 70
Cajeput, native, cns. lb. 1.75 - 2.10
redist., USP, cns. lb. 2.25 - 3.00
Calamus, bots lb.12.00 -20 00
Camphor, sassafrassy, dms. lb. .40 - .60
white, dms. lb. 35 - 50
Cananga, native, cns. lb. 7.85 -10 25
rectified, cns. lb.12.50 -14 75
Caraway, NF, cns lb. 3.75 - 5.00
Capsicum (see Capsicum oleoresin).
Cardamom, NF, bots lb.35.00 -50.00
Cassia, USP (see Oil, cinnamon, USP).
Castor blown, dms., c.l. lb. .1950- —
l.c.l. lb. .2000- —
dehydrated, bodied, dms., c.l lb. .2160- —
l.c.l. lb. .2210- —
tanks lb. No prices.
unbodied, dms., c.l. lb. .2010- —
l.c.l lb. .2060- —
tanks lb. No prices.
hydrogenated, bgs., c.l., dlvd lb. .20½- —
l.c.l. lb. .24 - —
No. 3, tech., dms., c.l. lb. .1475- —
l.c.l. lb. .1525- —
tanks lb. No prices.
No. 1, Brazilian, tanks lb. .12¾- —
sulfonated, 50%, dms., l.c.l. lb. .11½- .12
75%, dms., l.c.l. lb. .14½- .15
USP, dms., c.l. lb. .1700- —
l.c.l. lb. .1750- —
tanks lb. No prices.
refd. and deodorized, dms., c.l. lb. .1850- —
l.c.l. lb. .1900- —
tanks lb. No prices.
Cedarleaf, cns., dms. lb. 2.90 - 3.50
Cedarleaf, USP XII, cns., dms. lb. .80 - 1.50
Celery seed, bots lb.12.50 -20.00
Chamomile, blue, Hungarian bots. lb.90.00 -180.00
Chenopodium, NF, cns. lb. 4.00 - 5.00
Chinawood (see Oil, tung).
Cinnamon bark, bots lb.25.00 -65.00
leaf, crude, dms lb. 1.30 - 2.00
USP cns. dms., (Cassia) lb. No stocks.
Citronella, Ceylon, cns., dms. lb. 1.10 - 1.70
Java, true, dms lb. 1.75 - 2.00
Java-type, cns lb. 1.60 - 2.50
Clove, bud, USP, cns., dms. lb. 3.15 - 4.00
leaf, crude, dms lb. 1.30 - 2.00
Coconut, crude, tanks, N. Y. lb. .13 - —
Pac. Coast lb. .12 - —
refd., Cochin type, tax incl. ret. dms., l.c.l. lb. .19½- —
deodorized tax incl., non-ret. dms., c.l. lb. .21½- —
Cod, Newfoundland, dms. lb. .11 - —
Codliver, USP, dms. gal. 1.50 - 1.60
Copaiba, cns lb. 1.80 - 2.50
Coriander, USP, bots lb.11.75 -17.50
Corn, crude, tanks, works lb. .15¼- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05 - —
refd., salad, dms lb. .20¼- .20½
tanks lb. .18¾- —
Costus, bots lb. 8.00 - —
Cottonseed, crude, tanks, South East lb. .14⅜ Nom.
Valley lb. .14¼- —
Texas lb. .13⅞- .14
foots (soapstock), acid 95%, tanks, N. Y. lb. .04¾- —
raw, 50%, tanks, same basis. lb. .02¼ Nom.
refd., salad, dms lb. .19⅜- .19⅝
tanks lb. .17⅛- —
Creosote (see Creosote, coaltar).
Crude (see Petroleum, crude)
Cubeb, cns. lb. 4.25 - 6.25
Cumin, bots., cns lb. 4.15 - 5.75
Cypress, bots. lb. 5.30 - —
Degras (see D).
Dillseed, bots. lb. 2.80 - 4.25
Dillweed, dom., bots., dms. lb. 3.50 - 5.00
Dip (see D).
Erigeron, cns. lb. 5.50 - 7.50
Eucalyptus, NF, rectified, 70-80%, dms. lb. .70 - 1.00
80-90%, dms. lb. .85 - 1.25
Fennel, sweet, USP, cns. lb. 2.30 - 3.25
Fir, Canada, cns lb. 2.35 - 3.00
Fish, refd., alkali, dms lb. .1300- .1350
kettle-bodied, dms lb. .1530- .1580
light-pressed, dms lb. .1150- .1200
tanks lb. .1000- —
Fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gram, dms., 1,000,000 units. .08 - .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 - .10
25,000 to 35,000 A units per gram, dms., 1,000,000 units. .09 - .10
40,000 to 55,000 A units per gram, dms., 1,000,000 units .10⅛- .11
100,000 A units per gram., dms 1,000,000 units. .12 - .14
200,000 A units per gram., dms 1,000,000 units. .12 - .14
300,000 A units per gram., dms., 1,000,000 units. .12 - .14⅛
400,000 A units per gram, dms., 1,000,000 units. .12 - .14⅛
500,000 A units per gram., dms. 1,000,000 units. .12 - .14⅛

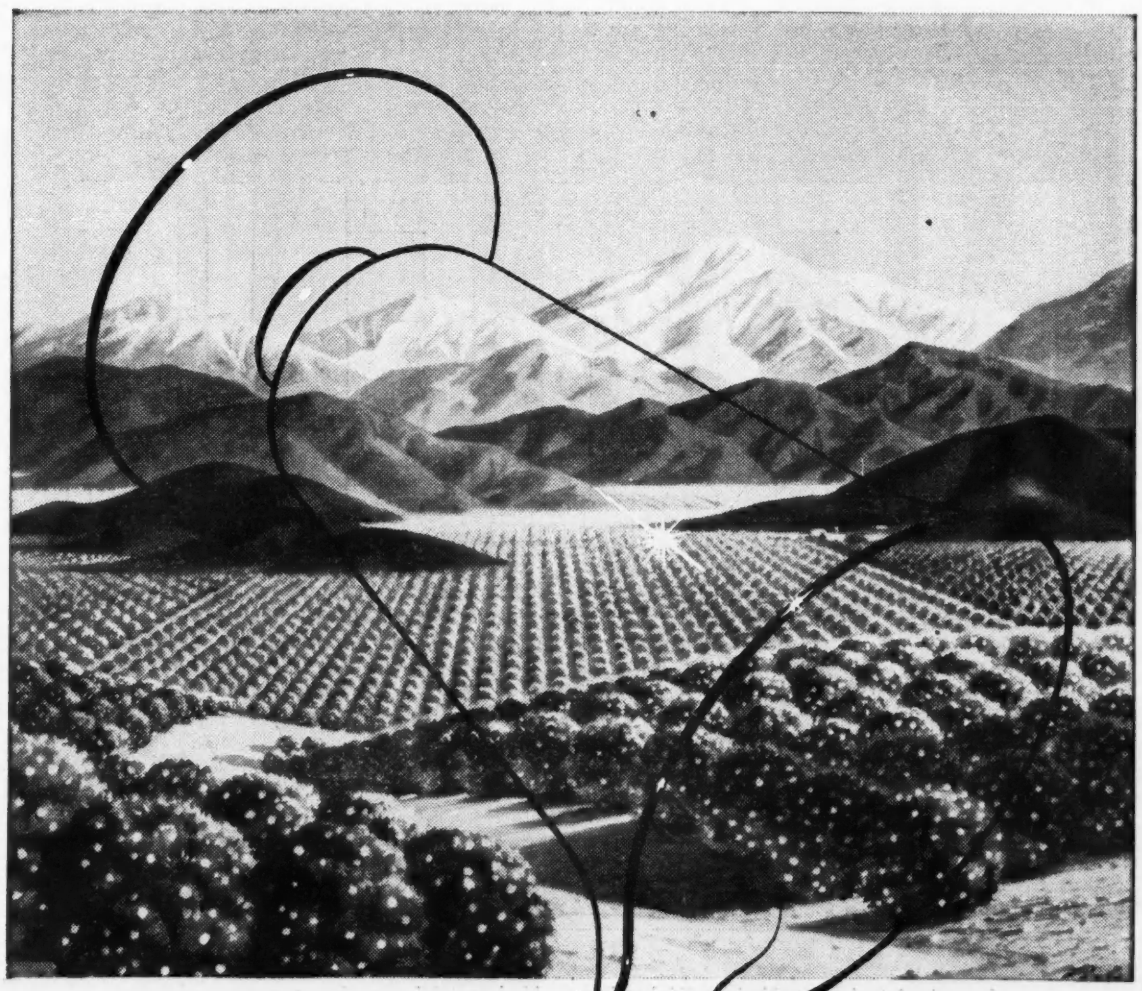
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.

Fusel (see F).
Garlic, pure, bots oz. 6.25 - 9.50
Gaultheria (see Oil, wintergreen).
Geranium, Algerian, cns. lb.11.50 -14.00
Bourbon, cns. lb.11.75 -14.50
Turkish (see Oil palmarosa)
Ginger, dist., bots. lb.16.50 -20.00
Grapefruit, dms. lb. 2.50 - 3.25
Grease, No. 1, dms lb. .13¾- .14
extra, winter, strained, dms. lb. .17 - .17⅛
prime, burning, dms lb. .18½- .19
Guaiacwood, cns lb. 1.40 - 1.90
Hemlock, cns. lb. 2.10 - 2.50
Juniper berry, NF, VIII, bots. lb. 2.75 - 4.00
twice rectified, bots lb. 3.60 - 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns lb. .42 - .65
Lard (see Oil, grease).
Laurel leaf, dms., cns. lb. 9.75 -12.50
Lavandin, dms., cns lb. 2.85 - 3.55
Lavender, flower, USP, French, 30-32% ester, cns lb. 3.55 - 4.60
38-40% ester, cns lb. 9.50 -13.20
40-42% ester, cns lb.10.00 -16.50
Spike, Spanish, cns lb. 1.85 - 2.30
Lemon, USP, Calif., cns., dms. lb. 4.75 - 6.15
Messina, cns. lb. 4.85 - 9.80
terpeneless, bots lb.32.90 -85.00
Lemongrass, cns., dms lb. 1.75 - 2.20
Lignaloe wood, Mex., cns lb. 3.70 - 4.60
Lime, dist., Mexican, cns lb. 3.30 - 4.75
West Indian, cs lb. 3.30 - 4.75
expressed, West Indian, cns. lb. 7.00 - 8.00
terpeneless, bots lb.29.50 -100.00

Oil, linseed, raw, dms., c.l., N. Y. lb. .1575- —
tanks, f.o.b. Minneapolis lb. .1300- —
New York lb. .1425- —
tankwagon, New York lb. .1455- —
Boiled linseed oil, 006c. per lb. higher
Mace, dist., cns., dms. lb. 2.75 - 3.60
Mandarin (see Oil, tangerine).
Menhaden, crude, tanks, works, Atlantic Coast lb. .07½ Nom.
Gulf and Atlantic ports, f.a.s. lb. .07⅛ Nom.
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms. lb. .18 - —
syn., bots lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms. lb. .33 - .34
20° cold test, dms lb. .32 - .33
30° cold test, dms lb. .30 - .31
Neroli, NF, French, bots lb.85.00 -310.00
Spanish, bots. lb.32.50 -85.00
Nutmeg, USP, dist., East Indian, cns., dms lb. 3.25 - 4.50
West Indian, cns., dms lb. 3.00 - 3.60
Ocotea cymbarum, dms lb. .90 - 1.50
Oiticica, liq., dms lb. .13½- .13¾
tanks lb. .12¼- —
Oleo, extra, dms lb. .14¾- .15
Olibanum, bots. lb. 5.50 - 7.65
extra fine, bots lb. 8.00 - —
Olive, edible, Spanish, dms., duty paid gal. 2.30 - 2.40
Tunisian, same basis gal. 2.15 - 2.20
Orange, sweet, dist., cns lb. .50 - .80
expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms. lb. .55 - 1.25
Florida, cns., dms. lb. .45 - 1.25
Messina, cns. lb. 3.85 - 5.85
West Indian, cns., dms. lb. 2.50 - 3.65
sesquiterpeneless, bots lb.65.00 -120 00
Origanum, Spanish, cns lb. 1.75 - 2.85
Palm, clarif., dms lb. .13 - .13½
kernel, denat. tanks lb. .12 - —
Palmarosa, cns. lb. 8.00 - 9.50

Oil, paraffin, pale, 100-110 vis., at 100° F., tanks, East Coast refy. gal. .14 - —
Patchouli, dms lb. 8.00 - 9.50
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills. lb. .18 - .18½
refd., dms lb. .23½- .24
tanks lb. .22 Nom.
Pennyroyal, USP, imported, cns. lb. 2.50 - 3.10
Peppermint, nat., dms lb. 7.25 - 8.25
redist., USP, dms lb. 7.60 - 8.50
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms lb. 3.50 - 4.80
Pimento, berry, NF, dms lb. 4.20 - 6.00
leaf, cns. lb. 2.60 - 3.10
Pine, dest.-dist., dms., l.c.l., works. lb. .11¼- —
ex-whse. lb. .1355- —
steam dist., dms., ex whse., N.Y.C. lb. .163 - —
Pineneedle, Siberian (see Oil, abies siberica).
Rapeseed, tankcars lb. .16 - —
Red (see Acid, oleic).
Rice, bran, clarif., dms., l.c.l. lb. .16 - —
tanks, dlvd. E lb. .14 - —
Rose, nat., Bulgarian, bots oz.43.50 -62.25
Rosemary, Spanish, USP, cns., dms lb. .60 - 1.00
tech., cns., dms lb .50 - 70
Rue, bots. lb. 2.00 - 2.50
Safflower, dms., c.l., Atl. coast lb. .1910- —
tanks, same basis lb. .1760- —
Sage, clary, bots lb 20.00 -25.00
Dalmatian, cns. lb. 4.75 - 6.00
Spanish, cns. lb 1.15 1 40
Sandalwood, NF, cns lb.13.25 -15.00
Sardine, crude, tanks, Pac. coast. lb. .09 Nom.

Oil, sassafras, artif., dms lb. .90 - 1.40
nat., dom., USP, dms lb. 1.75 - 2.10
imp., Brazilian (see Oil ocotea cymbarum).
Savin, cns. lb. 2.75 - —
Savory, cns lb. 4.25 - —
Sesame, refd., dms lb. .36 - .37
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works gal. .44 - —
tanks, works gal. 23 - —
Snakeroot, Canada, cns. lb.28.50 - 31 00
Soybean, crude, tanks, Decatur. lb. .12¾ Nom.
foots (soapstock), acid, 95%, tanks, N. Y. lb. .06 - —
raw, 50%, tanks, N. Y. lb. .03¼- —
refd., alkali, dms lb. .16¾- .17
tanks lb. .15¼- —
clarified, dms. lb. .16¼- .16¼
tanks lb. .14¾- —
salad, dms. lb. .17¼- .17¾
tanks lb. .15¾- —
Spearmint, USP, dms lb. 4.10 - 5.70
Sperm, bleached winter, 45° dms. lb. .1625- .1650
tankcars lb. .1450- —
nat., winter, 45°, dms lb. .1525- .1550
tankcars lb. .1350- —
Spruce, cns., dms lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb. 4.25 9.50
Southern, cns lb. 2.50 3.00
Tall, crude, dms., c.l., works lb. .03½- —
tanks, works lb. .02½- —
dist., dms., c.l., works lb. .07½- —
l.c.l., works lb. .07¾- —
tanks, works lb. .06¼- —
refd., dms., c.l., works lb. .06½- .06¾
l.c.l., works lb. .06¾- .07¾
tanks, works lb. .05¼- .05¾

## Oranges are not all alike...

There are as many different varieties of oranges as there are apples. They differ in physical appearance, juice character, peel flavor and in the many constituents which make up the component parts of the fruit. Many oranges that may be comparable in some characteristics may differ widely in others and, in some respects, one may be three or four times as potent as the other.

That is why Exchange Brand California Oil of Orange is the standard the world over for orange flavor excellence. You not only get the benefit of Exchange experience, technical skills and vast fruit resources, but Exchange Brand Oil of Orange is made only from California oranges with peel oil that is far richer in flavor strength and more intense in the aromatic constituents which are universally accepted as true orange flavor.

The cost of flavor is so small, why risk the quality of your product for penny economy? Protect its valuable reputation with the consistent quality and distinctive California feature of Exchange Brand Oil of Orange.

Exchange
OIL OF ORANGE U.S.P.

**Sunkist Growers**

PRODUCTS DEPARTMENT · ONTARIO, CALIFORNIA • *Produced by* The Exchange Orange Products Co. · Ontario, California
*Distributed in the U.S. exclusively by*
FRITZSCHE BROTHERS, INC., 76 Ninth Ave., New York 11, N.Y. • DODGE & OLCOTT, INC., 180 Varick St., New York 14, N.Y.

## Oil, Tallow—Petroleum, Mineral Spirits

Oil, tallow, acidless, dms. lb. .12 - .12½
Tangerine, Floridian, dms. lb. 2.00 - 2.80
Tansy, dms. lb. 7.50 - 8.40
Tar Acid (see T's).
Pine, coml., dms., c.l., works lb. .528 - .538
l.c.l., works lb. .601 - —
whse. lb. .712 - —
tanks, works lb. .427 - .438
rectified, NF, drs., incl., l.c.l., works, South lb. .77 - —
whse., N.Y.C. lb. .87 - —
Theobroma (see Cocoa butter).
Thyme, NF red, cns., dms. lb. 1.70 - 3.75
white, cns. lb. 1.95 - 4.00
tech., white, cns. lb. .40 - 1.85
Tung, dms., c.l., N. Y. lb. .24⅞- —
l.c.l., same basis lb. .25¼- .25½
tanks, N. Y. lb. .23¼- .23⅜
domestic mills lb. .22¼- .22⅜
Turkey red (see Oil, castor, sulfonated).
Turpentine, NF, cns., dms. lb. .28 - .45
Vetiver, Bourbon, cns. lb. 13.25 -17.00
Haitian, cns. lb. 11.00 -17.50
Java, cns. lb. 22.50 -40.00
Wheat, germ., 5-gal. dms. gal. 10.00 -13.00
White mineral, tech., 50-65 vis., non-ret. dms. c.l., t.o.b. N. Y. gal. .51½- .54½
65-75 vis., non-ret., dms., c.l., same basis gal. 52½- .55
l.c.l., same basis gal. .57½- .58½
80-90 vis., non-ret., dms., c.l., same basis gal. .53½- .56½
l.c.l., same basis gal. .58½- .59½
125-135 vis., non-ret., dms., c.l., same basis gal. .59½- .62½
l.c.l., same basis gal. .64½- .65½
145-155 vis., non-ret., dms., c.l., same basis gal. .66 - .68½
l.c.l., same basis gal. .71 - .71½
Oil, white, mineral, tech., 175-185 vis., non-ret., dms., c.l., same basis gal. .69½- .73
l.c.l., same basis gal. .74½- .75
USP, 200-210 vis., non-ret., dms., c.l., same basis gal. .73½- .75
t.c.l., same basis gal. .77½- .78
345-355 vis., non-ret. dms., c.l., same basis gal. .77 - .80
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern, cns lb. 3.20 -19.50
synthetic (see Methyl salicylate).
Wood (see Oil, tung).
Wormwood, cns. lb. 5.00 - 6.85
Ylang-ylang, Bourbon, bots. lb. 17.00 -30.00
extra, bots lb. 25.00 -40.00
Madagascar, bots. lb. No stocks
Oleostearine, bbls. lb. .11 - .11¼
Opium, USP, cns lb. 19.20 -19.45
gran., USP, cns. lb. 21.65 -21.90
powd., USP, cns lb. 21.65 -21.90
Orange cadmium lithopone, bbls., frt. alld. E. of Rockies lb. 1.56 - —
Chrome, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .31 - —
Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroaniline toner lb. 1.30 - —
Orange mineral, American, bbls., l.c.l., works lb. .2035- .2060
Molybdated, bbls lb. .45 - —
o-Nitroaniline toner, kgs lb. 1.15 - —
Orange peel, bitter, Haitian, bls lb. .14 - .16
sweet, bls lb. .16 - .18
Orris root, Florentine, bls lb. .45 - .50
powd., bbls., bxs lb. .50 - .53
Verona, bls lb. .35 - .40
powd., bbls., bxs lb. .40 - .45
Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthopehenetidin (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine)
Osage orange, cryst., No. 1, bbls., l.c.l lb. .40 - —
extract, liq., No. 1, bbls., l.c.l lb. .19 - —
Ouabain, USP, bots gram. 3.00 - 4.00
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
smaller lots, works lb. 4.92 - 5.17

## P

Pancreas substance, assay 1:75 bots., 5-lb. lots or more lb. 4.00 - —
Pancreatin, USP, bots lb. 1.90 - 2.10
Papain, USP, African, bots lb. 4.00 - 4.50
Ceylon lb. 3.00 - 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
smaller lots oz. 5.05 - 5.20
Sulfate, cns. oz. 7.10 - 7.35
Paprika, Roumanian, bgs. lb. .28 - —
Spanish, bgs. lb. .35 - .37
Yugoslavian, bgs lb. .36 - —
Para-aminophenol (see p-Aminophenol).
Para-anisidin (see p-Anisidine).
Parachloranilin (see p-Chloroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachloro-orthonitroanilin (see 4-Chloro-2 nitroaniline).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale, white, 121°-123°F, ASTM, solid, c.l., refy lb. .0710- —
fully refd., 122°-124°F, ATSM, slabs loose, c.l., refy lb. .0845- —
125°-127°F, ASTM, slabs loose, c.l., refy lb. .0845- —
130°-132°F., ASTM, slabs loose, c.l., refy lb. .0855- —
132°-134°, ASTM, slabs, loose, c.l., refy lb. .0855- —
135°-137°F., ASTM, slabs loose, c.l., refy lb. .0855- —

Prices for paraffin in bags and ctns., c.l. 7/10c. per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher and under 1,000 lbs. 3.7c. per lb. higher.

AMP temperatures are an arbitrary 3°F. higher than ASTM.

Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .10½- —
l.c.l., frt. alld lb. .12½- .13½
powd., bgs., c.l., frt. alld lb. .15½- —
l.c.l., frt. alld lb. .17 - —
USP X, fib. dms., c.l. lb. .183 - —
1,000-lb. lots lb. .193 - —
smaller lots lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l. works lb. .13½- —
l.c.l., works lb. .14½- —
tanks, works lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrophenol (see p-Nitrophenol).
Paranitrotoluene (see p-Nitrotoluene).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15% dealers, dms., works lb. .50 - .53
tech., dms., c.l., t.l., works lb. 1.3395- —
l.c.l., works lb. 1.51 - —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paratoluidine (see p-Toluidine).
Paris green, dealer, distributor, dms., c.l., works, frt. alld. on 98 lbs. or over lb. .36 - .40
l.c.l., same basis lb. .37 - .53
Passion flower herb, bls. lb .20 - .21
Peanut meal, 45%, old process, bgs., mills ton. 78.00 Nom.
Pectin, citrus, NF, powd., bbls lb. 2.05 - 2.06
tech., powd., bbls lb. 1.50 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units. .04½- .05
Procaine bulk 1,000,000 units. .04½- .05
Sodium, sterile, bulk, 1,000,000 units. .04½- .05
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22½- .29
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, industrial, tanks, Tex, refy gal. .14¼- —
Pepper, black, Malabar, spot, bgs lb. .51 - —
red, Gondar, spot, bgs lb. .28 - .30
Japanese, hontaka, bgs lb. .30 - .31
birdseyes, bgs., new crop lb. .51 - .52
Mombasa, bgs., shipt lb. .66 - .68
Nigerian, bgs. lb. .30 - .31
Turkish, bgs. lb. .19 - —
white, bgs. lb. .60 - —
Peppermint leaves, USP, dom., bls., dms lb. 70 - .75
imp., bls lb. 1.25 - —
Pepsin, NF, 1:3,000 bulk lb. 3.45 - 3.50
Perchloroethylene, dms., c.l., or truckloads, dlvd. E dm. 85.00 - —
dlvd. W dm. 88.50 - —
l.c.l., dlvd. E dm. 95.00 - —
dlvd., W dm. 58.50 - —
tanks, dlvd. E lb. .10¾- —
dlvd. W lb. .11¼- —
Peru balsam, dms lb. 1.50 - 1.75
Petrolatum, amber, dms., c.l., refy. lb. .05 - .05¾
l.c.l., dlvd lb. .06¾- .07
tanks, refy lb. .03¼- .04¼
cream, dms., c.l., refy lb. .06½- .07⅛
l.c.l., dlvd lb. .08½- .08¾
tanks, refy lb. .04⅜- .05⅛
extra amber, dms., c.l., refy lb. .05¼- .05⅞
l.c.l., dlvd lb. .07 - .07¼
tanks, refy lb. .03½- .04⅜
USP, white, lily, dms., c.l., refy. lb. .06⅜- .07¼
l.c.l., dlvd lb. .08⅜- .09⅛
tanks, refy lb. .04⅜- .06
snow, dms., c.l., refd lb. .07½- .07¾
l.c.l., dlvd lb. .09⅜- .09⅝
tanks, refy lb. .05⅜- .05⅞
soft, dms., c.l., refy lb. .06¾- .07¾
l.c.l., dlvd lb. .08½- .08¾
tanks, refy lb. .05 - .05⅛
yellow, soft, dms., c.l., refy. lb. .05¼- .05¾
l.c.l., dlvd lb. .06⅜- .07⅛
tanks, refy lb. .03½- .05⅞
Petroleum, lacquer diluent, 150°-240°F., b.r., tanks, West Coast, ex tax, Los Angeles, gal. .169 - .204
East coast, N. J., N. Y. gal. .19 - —
Group 3, benzol-type gal. .14125- .14625
toluol-type gal. .13125- .13375
Mineral spirits, reg., tanks, California, ex tax, San Francisco gal. .164 - —
East coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .11875- —
tankwagon, Boston gal. .19 - —
Buffalo gal. .195 - —
Chicago gal. .279 - —
Cleveland gal. .22 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Providence gal. .195 - —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INTERMEDIATE FOR SYNTHETIC DETERGENTS

From its introduction, Neolene 400 has been recognized for quality as a raw material for synthetic detergents and other surface-active agents of the alkyl aryl sulfonate type. Today Neolene 400 exhibits exceptional quality when used in the newest method of sulfonation—utilizing liquid $SO_3$.

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PETROCHEMICAL DEPARTMENT, Division D-6

630 Fifth Avenue, New York 20, N. Y. 1353 No. North Branch Street, Chicago, Ill.

Export: Airco Company International, 60 East 42nd Street, New York 17, New York

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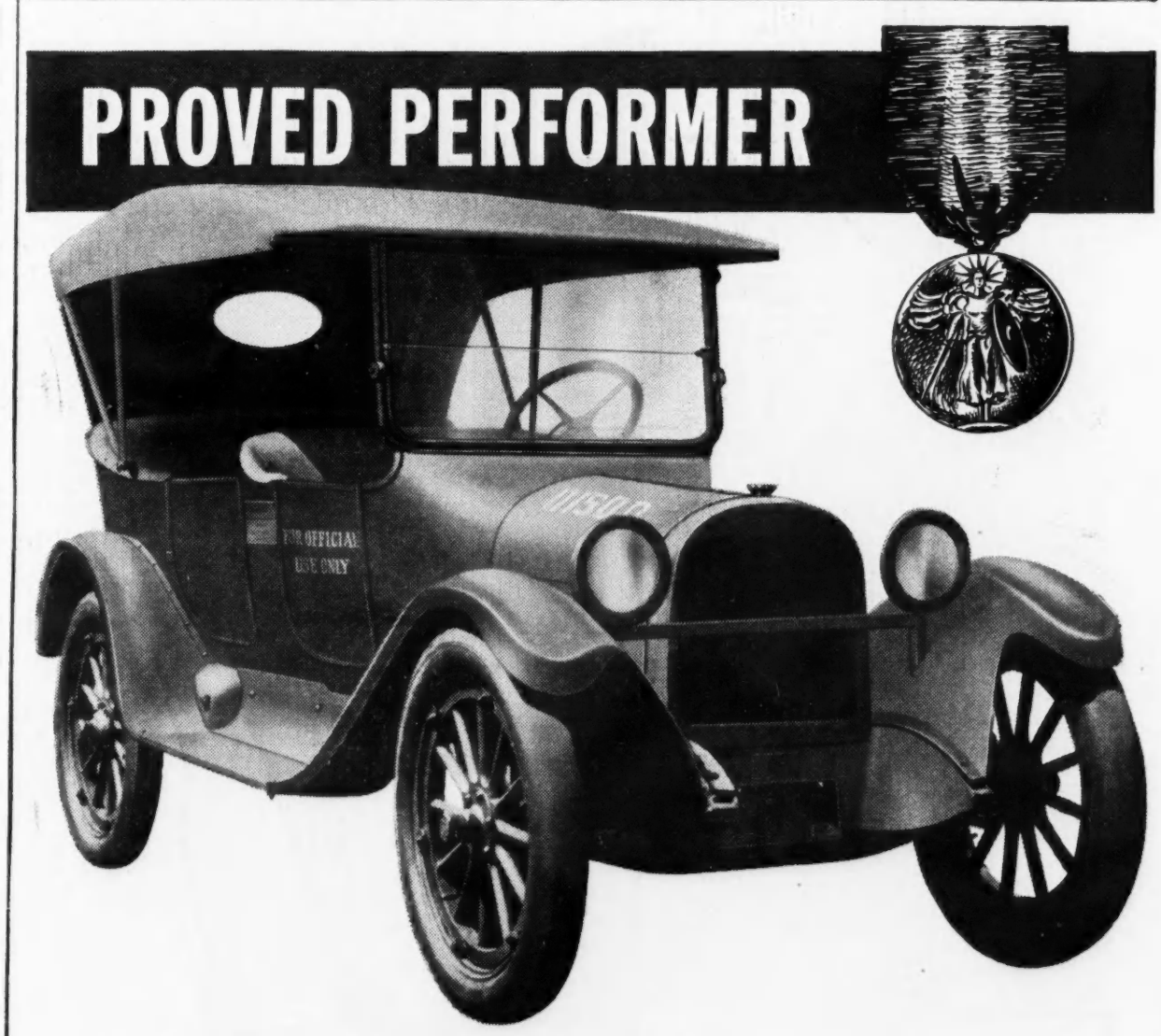
Petroleum mineral spirits, odorless, tanks, refy., Watson, Cal. gal. .245 - —
Borger, Tex. gal. .24 - —
Houston, Tex. gal. .24 - —
Wood River, Ill. gal. .2625- —
dlvd. N. J. gal. .32 - —
dlvd. N. Y. gal. .33½- —
tankwagon, N. J., dlvd. gal. .36 - —
N. Y., dlvd. gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J. and N. Y. gal. .17 - —
Group 3 gal. .12875- —
tankwagon, Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F. b.r. tanks, West Coast, Los Angeles gal. .169 - —
Portland, Ore. gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash. gal. .175 - —
East Coast, N. J., N. Y. gal. .18 - —
Group 3 gal. .12875- —
tankwagon, Boston gal. .205 - —
Chicago gal. .209 - —
Cleveland gal. .23 - —
Newark gal. .195 - —
New York gal. .195 - —
Philadelphia gal. .20 - —
Pittsburgh gal. .19 - —
Solvent, partial aromatic, tanks, 205°-232°F. b.r., 41°C., m.a.p., N. Y., N. J. gal. .245 - —
212°-278°F. b.r., 43°C. m.a.p., N. J. gal. .26 - —
212°-284°F. b.r., 19°C. m.a.p., N. J. gal. .29 - —
224°-280°F. b.r., 48°C. m.a.p., Houston gal. .215 - —
273°-361°F. b.r., 29°C. m.a.p., N. J. gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°-386 F., b.r., 31°C., m.a.p., N. J. gal. .29 - —
310°-344°F. b.r., 13.5°C. m.a.p., Texas City gal. .33 - —
310°-348 F. b.r., 17°C., m.a.p., N. Y., N. J. gal. .35 - —
320°-360°F. b.r., 16°C. m.a.p., N. Y., N. J. gal. .33 - —
324°-349°F. b.r., 37°C. m.a.p., Houston gal. .33 - —
341°-390°F. b.r., 35°C. m.a.p., N. J. gal. .27 - —
352°-413°F. b.r., 30°C. m.a.p., Houston gal. .33 - —
352°-410°F. b.r., 16.5°C. m.a.p., Texas City gal. .33 - —
358°-401°F. b.r., 25°C. m.a.p., N. Y., N. J. gal. .39 - —
364°-404°F. b.r., 19°C. m.a.p., N. Y., N. J. gal. .425 - —
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J. gal. .33 - —
rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y. gal. .18 - —
Group 3 gal. .12875- —
Stoddard, tanks, East Coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .12375- —
Pennsylvania, western gal. .15 - —
Boston gal. .19 - —
Chicago gal. .289 - —
Cleveland gal. .22 - —
Los Angeles, ex tax gal. .194 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret., ret., dms., c.l., works lb. .16 - .18¼
l.c.l. works lb. .17 - .18½
tanks, works lb. .14 - .16½
50-53% sulfonic content, non-ret. dms., c.l., works lb. .15½- —
l.c.l., works lb. .16½- —
tanks, works lb. .12½- —
o-Phenetidine, dms., works lb. 1.00 - —
p-Phenetidine, dms., works lb. 1.00 - —
Phenobarbital, USP, dms., 100-lb. lots lb. 3.50 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.50 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt. alld. E. of Rockies lb. .16¾ —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .15 - —
82-84% (cresol 16-18%), non-ret. drums, c.l., same basis lb. .16¼- —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14½- —
39° or above, tar distilled, non-ret. dms., c.l., same basis lb. .17¼- .17¾
l.c.l., same basis lb. .18 - .18½
tanks, same basis lb. .15½- —
USP, syn., dms., c.l., frt. alld. lb. .18¾- —
1,000-lb. lots or more, same basis lb. .19½- —
less than 1,000-lb. lots, same basis lb. .20½- —
tanks, same basis lb. .17 - —
Phenolphthalein, USP or yellow, bbls., dms., 2,000-lb. lots. lb. 1.10 - —
smaller lots lb. 1.12 - 1.17
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb. .39 - —
over 2,100 lbs., same basis lb. .41 - —
less than 2,100 lbs., same basis. lb. .43 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb. 2.40 - 2.70
100%, bots lb. 4.00 - 4.65
Phenylacetamide, 125-lb. dms., works lb. 1.10 - —
smaller dms., works lb. 1.15 - 1.10
dl-Phenylalanine dms., works lb. 27.00 -37.50
1-Phenyl-3-carbethoxy pyrazolone-5, 250-lb. fib. dms., dlvd. E lb. 3.60 - —
smaller dms., dlvd. E lb. 4.00 - —
Phenyldiethanolamine dms., c.l., dlvd. E lb. .40½- —
l.c.l., dlvd. E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. .90 - —
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine, redist., dms., works lb. 2.00 - —
tech., refd., dms., same basis lb. 1.10 - 1.35
Phenylethanolamine, dms., c.l., works lb. .69¼- —
l.c.l. same basis lb. .70 - —
Phenylethyl acetate, bots lb. 1.30 - —
b-Phenylethylamine, dms., 1,000-lb. lots, works lb. 1.10 - —
smaller lots, works lb. 1.15 - 1.40
Phenylethylphenyl acetate, bots lb. 3.95 - 4.40
Phenylhydrazine base, CP, bots lb. 3.00 - 3.07
Hydrochloride, coml., kgs., works. lb. 1.75 - —
purif., bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb. lots, dlvd. E lb. 1.70 - —
smaller lots, dlvd lb. 2.00 - —
o-Phenylphenol, dms., l.c.l., works lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .35 - —
l.c.l., works lb. .39½- —

Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
C.P., bots., works lb. 17.75 - —
tech., tin dms., works lb. 10.45 - —
Phosphate, defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton. 43.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long-ton. 4.68½- —
70-68%, b.p.l., c.l., same basis long-ton. 5.08½- —
72-70%, b.p.l., c.l., same basis long-ton. 5.73½- —
75-74% b.p.l., c.l., same basis long-ton. 6.73½- —
78-76%, b.p.l., c.l., same basis long-ton. 7.73½- —
The above prices are based on fuel oil at $2.20 per bbl. and labor at $1.31.
Phosphorus, amorph., red, dms., t.l. lb. .43 - —
smaller lots lb. .44 - .45
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l., works, frt. equald. lb. .21 - .21½
tanks, works, frt. equald. lb. .17 - .19
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., dms., works lb. .17 - —
tanks, works lb. .12½- —
Pentasulfide, solid, dms., c.l., works lb. .11½- —
l.c.l., works lb. .13 - .13½
Pentoxide, dms., c.l., works lb. .13½- —
l.c.l. works lb. .16½- —
Sesquisulfide, tins, cs., works lb. .29 - —
export, dms. lb. .31 - .36
Trichloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .17 - —
tankcars, works lb. .12½- —

## Petroleum, Mineral Spirits, Odorless—Potassium Bichromate

Phthalic anhydride, ogs, c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19¼- —
Phthalimide, 97%-98%, dms., works, frt. alld lb. .68 - .70
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
a-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline, 5°, dms., c.l., works. lb. .32½- —
l.c.l., works lb. .33 - —
g-Picoline, 98%, dms., c.l., works. lb. 2.65 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Nitrate, USP, bots., vials oz. 4.80 - 4.90
Pimento, Jamaican, bgs lb. 1.00 - —
Mexican, bgs. lb. .80 - —
Pink root, bls. lb. 3.00 - 3.25
d-Piperazine hexahydrate, French Codex, bots kilo. 8.00 - 8.50
Piperidine, dist., dms., frt. equald. lb. 2.60 - 2.70
Piperonyl butoxide, dms., dlvd. E. lb. 4.50 - 5.05
Cyclonene, dms., dvld. E lb. 3.70 - 4.25
Pitch, coaltar, 150°-170°F. m.p., tanks, works ton. 35.00 - —
Cottonseed, raw, dms., works lb. .02¼- .03
Linseed, dms. lb. .06 Nom.
Marine, dms. lb. .04¼- .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works lb. .05 Nom.
Tall, dms., works lb. .03¾- .04½
Plaster of Paris (see Gypsum).
Platinum metal, works oz. 76.00 -79.00
Pleurisy root, bls. lb. .45 - .50
Podophyllum resin, NF, dms. lb. 11.93 - —
Poke root, bls lb. .19 - .22
Polymyxin, bulk, bots., dms, 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
Tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
Poppy seed, Argentine, bgs lb. .20½- —
Dutch, bgs lb. .24½- —
Iranian, bgs. lb. .16½- —
Polish, bgs. lb. .23½- —
Turkish, bgs. lb. .21½- —
Potash, caustic, reg., flake, 88-92%, dms., c.l., works 100 lbs. 9.15 -
l.c.l., works 100 lbs. 10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid, 88-92%, dms., c.l., works 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF, dms lb. .31 - .36
Bicarbonate, USP, gran., dms lb. .22 - —
powd. dms lb. .24 - —
Bichromate, bgs., c.l., works lb. .15 - —
l.c.l., works lb. .15½ —
Potassium bichromate in dms. ½c. higher.




This Dodge is the first passenger car used by the U. S. Army as a combat vehicle. It accompanied General John J. Pershing on the 1916 Mexican Expedition, and at one time was driven by a young lieutenant named George S. Patton! The old car still runs beautifully, 40 years since it saw the smoke of battle.

Outstanding service and time-tested dependability are points of pride with Esso Petroleum Solvents, too. These fine products have proved their worth over many years of use by customers who expect . . . and get . . . the highest quality for their money. Why not see for yourself? Specify Esso Petroleum Solvents next time you order.

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**MULTI-STORAGE AVAILABILITY**—water terminals in industrial centers.

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**SOLVENCY** — Esso aliphatics and Solvesso aromatics cover both high and low solvency ranges.

**CONTROLLED EVAPORATION**—available in a wide range of evaporation rates with precise characteristics to meet your most exacting requirements.

**FOR TECHNICAL ASSISTANCE** — If you have a solvents problem or want further information on the specifications and characteristics of Esso Solvents—write or call our office nearest you. Our technicians will be glad to assist you.

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## Potassium Bitartrate—Quinoline

Potassium bitartrate, NF, dom., gran. or powd., l.c., bbls., 5,000 lbs. 1 shipt ..lb. .36½- —
dms., c.l. ..lb. .36 - —
smaller lots ..lb. .37 - .40
imp., kgs ..lb. .27¾- .28
Bromate, dms., 1,000 lbs. or more ..lb. .47 - —
25-200-lb. lots ..lb. .57 - .62
Bromide, USP, gran., bbls., kgs. ..lb. .35 - .36
Carbonate, N.F., gram., bbls., dms ..lb. .20 - —
powd., bbls., dms ..lb. .21 - .22
tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Chlorate, cryst., dms., c.l., works ..lb. .10¼- —
l.c.l., works ..lb. .11½- .12
powd., dms., c.l., works ..lb. .10¾- —
l.c.l., works ..lb. .12 - .12½
export, dms., New York ..lb. .12¾- .13½
NF, gran., 25-lb. metal dms ..lb. .35 - —
Chloride, USP, cryst., dms ..lb. .21 - .23
gran., dms ..lb. .15 - .17
powd. dms ..lb. .24 - .26
Chromate, tech., bgs ..lb. .50 - .50½
Citrate, USP gran., dms ..lb. .41 - —
powd., dms ..lb. .40½- .41½
Cyanide, dms., 20,000-lb. lots or more, works ..lb. .45 - —
2,000-19,999-lb. lots, works ..lb. .455 - —
smaller lots, works ..lb. .465 - —
Dichromate (see Potassium bichromate).
Ferricyanide, drums, ton lots ..lb. .50 - —
Ferrocyanide, bgs., ton lots ..lb. .22½- —
smaller lots ..lb. .23 - —
Fluoborate, fib. dms., c.l., works ..lb. .30 - —
l.c.l., works ..lb. .31 - —
Fluoride, dms., works ..lb. .37 - .38
Gluconate dms ..lb. .75 - .79
Glycerophosphate, 75% solution, cbys ..lb. 2.15 - 2.25
Guaiacolsulfonate, NF, dms ..lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb dms. 1 to 100-dm. lots ..lb. .28½- .30
Hypophosphite, NF, fib. dms., ton lots or less ..lb. 1.00 - 1.03
Iodide, dms. ..lb. 1.90 - 1.95
Manure salt, 22% $K_2O$, June shipt. unit-ton. .17 - .1765
July forward unit-ton. .1765- .21
Metabisulfite, gran. dms ..lb. .20 - .21
powd. dms ..lb. .25 - —
Muriate, 59-63% $K_2O$, bulk, c.l., works, June shipt unit-ton. .36 - —
July forward unit-on. .38 - —
bgs., c.l., works, June shipt. ton 26.00 - —
July forward ..ton 27.20 - —
Nitrate, cryst., bbls., 20-ton lots. 100 lbs. 14.40 - —
smaller lots ..100 lbs. 14.65 -14.90
gran., bbls., 20-ton lots. 100 lbs. 9.75 - —
smaller lots ..100 lbs. 11.10 -11.50
powd., bbls., 20-ton lots. 100 lbs. 10.75 - —
smaller lots ..100 lbs. 12.00 -12.50
USP, gran., dms. ..lb. .18 - —
Potassium nitrate in bags, 50c. per 100 lbs. less in kegs, $1 more.
Oxalate, neutral, tech., fine gran., bbls., dms ..lb. .30 - .32
Pentaborate, gran., bgs., c.l., works ..ton. 189.00 - —
dms., ton lots, ex whse ..ton. 293.50 - —
smaller lots, ex whse ..ton. 29800 - —
Powdered Potassium pentaborate, $10.25 per ton higher.
Perchlorate, dms., c.l., works ..lb. .15 - —
l.c.l., works ..lb. .16½- —
Permanganate, tech., dms., works ..lb. .22½- .23¼
USP dms. works ..lb. .24¾- .30¼
Persulfate, dms., 5-ton lots, works, lb. .18 - —
1-ton lots, works ..lb. .20 - —
Phosphate, tetrabasic, bbls., works, lb. .16½- .18½
Prussiate, red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass, bgs., c.l., works ..100 lbs. 17.00 -17.30
l.c.l. ..100 lbs. 17.80 - —
Silicate, soln., clarif., 29° Be, 1:2.5, dms., c.l., works ..100 lbs. 5.80 - —
l.c.l., 5 dms., or more, works ..100 lbs. 6.55 - 6.95
tanks, works ..100 lbs. 5.45 - —
electrical grade, 29° Be, 1:2.0 dms., c.l., works ..100 lbs. 6.50 - —
l.c.l., 5 dms. or more, works ..100 lbs. 7.25 - 7.65
tanks, works ..100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works ..100 lbs. 6.45 - —
l.c.l., 5 dms. or more, works ..100 lbs. 7.20 - 7.60
tanks, works ..100 lbs. 6.10 - —
Silicofluoride, bbls., works ..lb. .09 - .10
Stannate, dms., frt. alld. E ..lb. .678 - .744
Sulfate, agricultural, 50% $K_2O$, bulk, works, June shipt ..unit-ton. .64 - —
July forward ..unit-ton. .67 - —
NF VII cryst., dms ..lb. .31 - .33
gran., dms. ..lb. .18½- —
powder dms ..lb. .36½- .17
Sulfocyanide, NF, cryst. (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms ..lb. .84 - .94
tech., works ..lb. .77 - .79
Titanate, ctns., c.l., works ..lb. .14 - —
5-ton lots, works ..lb. .14½- —
1-ton lot or less works ..lb. .14¾- —
Toluene sulfonate, dms., c.l. or tl. works ..lb. .42 - —
l.c.l., works ..lb. .46 - —
Potassium-magnesium sulfate, bulk, works basis 40% $K_2SO_4$, 18% MgO, June shipt ..ton. 13.45 - —
July forward ..ton. 14.00 - —
Potassium-sodium tartrate, NF, gran., powd., dms., c.l. ..lb. .36½- —
5,000-lb. lots ..lb. .37 - —
smaller lots ..lb. .37½- .42½
Potassium-titanium fluoride, fib. dms., works ..lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works ..lb. .50 - —
l.c.l., works ..lb. .52½- .55
Pregnenolone, bots ..gram. .45 - —
Acetate, bots ..gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld ..lb. 2.90 - —
100-lb. lots ..lb. 3.00 - 3.60
Progesterone, USP, bots., 100 gram lots ..gram. .50 - —
Acetate, bots ..gram. .70 - —
Propane, indust., tanks, group 3, gal. .02½- —
N. Y. Harbor ..gal. .07¼- —
n-Propyl acetate, dms., c.l., dlvd ..lb. .12¾- —
l.c.l., dlvd ..lb. .13¾- —
tanks, dlvd ..lb. .1075- —
Gallate, dms., 100 to 2,000-lb. lots, works ..lb. 3.90 - 4.40
p-Hydroxybenzoate, USP, dms ..lb. 2.30 - 2.40
Thiourcil, bots., 50-kilo lots or more ..kilo. 55.00 - —
smaller lots ..kilo. 55.10 -55.30
Propylene dichloride, dms., c.l., dlvd. E ..lb. .0825- —
l.c.l., same basis ..lb. .095 - —
tanks, same basis ..lb. .07 - —
Prices in West 1c. higher dlvd., on same basis.
Glycol, indust., dms., c.l., dlvd. E ..lb. .15½- —
l.c.l., same basis ..lb. .16½- —
tanks, same basis ..lb. .13½- —
USP, dms., c.l., dlvd. E ..lb. .17½- —
l.c.l., same basis ..lb. .18½- —
tanks, same basis ..lb. .15½- —
methyl ether, dms., c.l., dlvd ..lb. .20 - —
l.c.l., same basis ..lb. .21 - —
tanks, same basis ..lb. .18½- —
Oxide, dms., c.l., dlvd. E ..lb. .17½- —
l.c.l., dlvd. E ..lb. .18½- —
tanks, dlvd. E ..lb. .15½- —
Psyllium seed, black, bgs. ..lb. .55 - —
blonde, bgs. ..lb. .18 - —
husks, bgs. ..lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots ..lb. .03⅝- .04¼
smaller lots ..lb. .03⅞- .04½
imp., Italian, silk-screen, coarse, bgs., ton lots ..lb. .06½- —
fine, bgs., ton lots ..lb. .04 - —
sun dried, coarse, bgs ton lots ..lb. .02½- .04
fine, bgs., ton lots ..lb. .02½- .04
Pumpkin seed, bgs ..lb. .25 - .26
Pyrethrin, syn., (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works ..lb. .45 - —
powd., 1.3% pyrethrins, bbls., works ..lb. .65 - —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works ..gal. 8.35 - 8.55
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works ..gal. 41.75 -42.75
Oleoresin, dewaxed, 20%, dms., works ..lb. 9.80 - 9.90
purif., 20% dms., works ..lb. 10.00 -10.10
Pyridine, denaturing, dms., c.l., works and frt. equald ..gal. 2.77 - —
l.c.l., same basis ..gal. 2.80 - —
refd., 2°, non-ret. dms., l.c.l., same basis ..lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots ..gram. .46 - —
Pyrites, Canadian, works ..long-ton. 3.00 - 5.00
Pyrocatechol (see Catechol).
Pyrogallol, NF, dms. ..lb. 3.27 - 3.30
Pyroxylin, scrap, ungrd., amber, dms., works ..lb. .20 - —
black, dms., works ..lb. .12 - —
mixed, mottled, dms., works ..lb. .13 - —
shavings, amber, cs., works ..lb. No stocks.
mixed colors, dms., works ..lb. .11 - —
white, china, ivory, dms., works ..lb. .16 - —
dense, opaque, dms., works ..lb. .12 - .15
translucent pastels, cs., works ..lb. .14 - —
transparent colorless, dms., works ..lb. .25 - —
colors, dms., works ..lb. .15 - —
USP, bots ..lb. 9.50 - —

## Q

Quassia chips ..lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin, bgs., c.l., works ..lb. .16½- .16¾
liq., 35% tannin, bbls., works, lb. .08¼- —
liq., clarif., 64% tannin, bgs., c.l., ex-dock, duty extra. lb. .12 23/64- —
ord., 63% tannin, bgs., c.l., same basis ..lb. .11 21/32- —
Quercitron extract, cryst., No. 1, bbls., l.c.l. ..lb. .40 - —
liq., No. 1, bbls., l.c.l. ..lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs ..lb. 2.00 Nom.
Quinidine, NF, V cryst., cns., 100-oz. lots oz. 1.15 - —
powd., precip., cns., 100-oz. lots, oz. 1.17 - —
Sulfate, USP, cns., 100-oz. lots, oz. .87 - —
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots oz. .37½- —
Dihydrochloride, USP, cns., 100-oz. lots oz. .54 - —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½- —
Hydrobromide, NF, cns., 50-oz. cns. oz. .47½- —
Hydrochloride, USP, cns., 100-oz. lots oz. .47½- —
Phosphate, NF, cns., 100-oz. lots oz. .61 - —
Salicylate, NF, cns., 100-oz. lots oz. .55 - —
Sulfate, USP, cns., 100-oz. lots oz. .42 - —
Quinine and Urea hydrochloride, NF, cns. oz. .56 - —
Quinoline, dms., c.l., frt. equald. lb. .56¾- —
l.c.l., same basis ..lb. .51¼- —
tanks, same basis ..lb. .50 - —


"Brushing or Rolling... Painting is Fun!"

IF YOUR ODORLESS PAINTS CONTAIN SINCLAIR ODORLESS SOLVENTS

**SINCLAIR ODORLESS SOLVENT LIGHT**
Distillation Range
IBP...345°F. EP...400°F.
Kauri-Butanol Value...27

**SINCLAIR ODORLESS SOLVENT HEAVY**
Distillation Range
IBP...375°F. EP...465°F.
Kauri-Butanol Value...26

By helping *you* create a truly odorless paint, Sinclair helps *you* keep *your* customers happy with *your* product. And that means more satisfied repeat customers, more volume through repeat sales for *your* business.

With either of Sinclair's two types of top-quality Odorless Solvents, you can produce a superior odorless paint. For your protection against contamination, Sinclair maintains a fleet of special tank cars, used *exclusively* in Odorless Solvent service. Light and Heavy Odorless Solvents are available in full and split tank car quantities. Prompt shipments to meet your production requirements are assured. For samples, prices and complete information on Sinclair Odorless Solvents, write or call—

**SINCLAIR CHEMICALS, INC.**
(Subsidiary of Sinclair Oil Corporation)
600 Fifth Avenue, New York 20, New York, Circle 6-3600

## R

R salt, paste, dms., frt. alld., 100% basis lb. .88 - —
powd., frt. alld., 100% basis lb. .98 - —
Rauwolfia serpentina root, powd., bbls, dms lb. 2.00 - 3.00
Red, BON acid maroons, pure, bbls. lb. 1.75 - —
resinated, bbls lb 1.50 - —
arylid, deep shades, bbls lb 3.60 - —
light shades, bbls lb. 2.75 - —
maroon, bbls lb 3.60 - 5.90
Cadmium, CP, dark shade, bbls., frt. alld, E. of Rockies lb. 4.30 - —
light shade, bbls., same basis. lb. 4.00 - —
medium shade, bbls., same basis lb. 4.25 - —
lithopone, medium light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls, same basis lb. 3.95 - —
deep shade, bbls., same basis. lb. 1.93 - —
light shade, bbls., same basis. lb. 1.70 - —
maroon shade, bbls., same basis lb. 2.05 - —
medium shade, bbls., same basis lb. 1.85 - —
medium-light shade, bbls., same basis lb. 1.77 - —
orange-red shade, bbls., same basis lb. 1.64 - —

Red cadmium lithopone all shades, in smaller pkgs., 5c. per lb. higher; all prices are 1c per lb higher ex whse. Los Angeles and San Francisco

Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar)
Eosin toner, bbls, works lb. 1.60 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .12¾- —
Iron oxide, nat., 75%-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley O., Easton, Pa., East St. Louis lb. .04 - .07½
syn. 98% ferric oxide, bgs., c.l., works lb. .12¾- —
l.c.l., works lb. .13 - —
Lake C toner, alizarin, bbls., works lb. 1.10 - 1.20
Lithol toner, bbls., works lb. .85 - —
rubine toner, pure, bbls., works. lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia type, bbls., works lb. 1.40 - —
Maroon toner, MNPT, kgs., c.l., works lb. 3.60 - —
10,000-lb. lots, works lb. 4.22 - —
smaller lots, works lb. 4.24 - —
Metallic, bbls., c.l., works lb. .02½- —
l.c.l., works lb. .02¾- —
Naphthol ITR, bbls., works lb. 5.25 - —
Oxide (see Red iron oxide).
Persian Gulf, bgs., c.l., works lb. .06¾- —
l.c.l., works lb. 07 - —
Para, toner, bbls. lb. 1.05 - —
chlorinated, kgs lb. 1.10 - 1.15
Phloxin toner (see Red eosin toner).
Rhodamine, molybdated, PMA, kegs lb. 5.35 - —
tungstated, PTMA, works, kegs. lb. 6.15 - —
Spanish oxide, bbls., c.l., ex dock lb. .05¾- —
l.c.l., ex dock lb. .06 - —
ex whse., New York lb. .06½- —
Toluidine toner, deep shades, kgs., works lb. 1.60 - —
light shades, kgs., works lb. 1.60 - —
Turkey, bbls., works lb. .62 - —
Tuscan, bbls., frt. equald lb. .24½- .25
Venetian, 15%, bgs., works lb. .0350- .037
20%, bgs., works lb. .0475- —
25%, bgs., works lb. .0525- —
30%, bgs., works lb. .0550- —
35%, bgs., works lb. .0575- —
40%, bgs., works lb. 0625- —
Watchung-type, bbls lb. 1.95 - —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red).
Red saunders, NF, powd., bbls lb. .35 - .40
Reserpine, cryst., bots gram 12.00 - —
Resorcinol, tech. grade, dms., c.l., works lb. 77½- —
l.c.l., works lb. 78½- —
USP, cryst., dms., works lb. 2.75 - —
powd., dms., works lb. 2.95 - —
Monoacetate, NF, dms lb. 3.00 - 3.25
Rhatany root, bgs lb. .15 .16
Rhodinol, 5-lb. cans lb. 25.50 -34.00
Rhubarb root, India, whole, bgs lb. 1.75 Nom.
powd., bbls lb. 2.50 Nom.
Riboflavin, USP, bots., dlvd kilo. 100.00 - —
readily soluble, bots., dlvd kilo. 130.00 - —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo. 140.00 - —
Rochelle salt (see Potassium-sodium tartrate).
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, 100% basis lb. 10.00 - —
resin, 25-45%, fib. dms., works, 30% basis lb. 3.00 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03 - —
ton lots, same basis lb. .04 - —
Rutin, NF, fib dms 25-kilo lots, kilo. 17.50 -18.50
10 to 25-kilo lots kilo. 17.50 -20.00
1 to 10-kilo lots kilo. 18.90 -20.00
Ryania, 100% powd., bgs., c.l., works. lb. .22 - —
l.c.l., same basis lb. .24 - —

## S

Sabadilla seed, powd., bbls lb. .49 - .49¼
activated, ground with lime, bbls lb. .30 - .32
Saccharin, USP, cryst., soluble, dms., 1000-lb lots lb 1.60 - —
smaller lots lb 1.70 - 1.80
powd., soluble insoluble, dms., 1000-lb lots lb 1.65 - —
smaller lots lb 1.75 - 1.95
Saffron, Spanish, USP, tins lb. 35.00 -40.00
Safrol, dms lb. 1.60 - —
Sage, Cretan, bgs lb. .11 - —
Dalmatian, bgs. lb. .40 - —
Italian, bgs lb. .13 - —
Sago flour raw, bgs lb. .06½- .06¾
refd., bgs lb. .08¼- .08¾
Sal soda (see Soda sal).
Salol, NF, gran., bbls., kgs lb. 1.10 - —
Powdered salol, 25c. higher
Salt, rock, paper bgs., c.l. 100 lbs. .93 - —
table, vacuum, common, fine, paper bgs., c.l 100 lbs. 1.12 - —
Saltcake, dom., bulk, works, 100% $Na_2SO_4$ basis ton 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies, chips bgs. .65 - .66
powd., fib. dms lb. .75 - .76
Sanguinarine nitrate, bots oz. 4.75 - 5.50
Sarsaparilla root, imp., Honduras, bls lb. .65 Nom.
Mexican, bls lb. .65 Nom.
Sassafras root bark, ord., bls lb. .45 - —
select, bbls. lb. .65 - —
Schaeffer's salt, paste, dms., frt. alld., 100% basis lb. .95 - —
powd. bgs., frt. alld lb. .95 - —
Scopolamine hydrobromide, USP, bots. oz. 10.25 -11.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. .30½- —
smaller lots lb. .31 - .32
Selenium, powd., dms., dlvd lb. 6.00 - 7.25
Senega root, bls lb. 3.50 - 3.60
Senna leaves, Alex., whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .16 - .18
No. 2, bls. lb. .13 - .15
No. 3, bls. lb. .11 - .13
powdered, bbls., bxs lb. .18 - —
pods, bls. lb. .14 - —
Serpentaria root, bls lb. 4.95 - —
Sesame seed, Nicaragua, hulled, shipt., bgs lb. .24 - —
nat., bgs lb. .17 - —
Salvadorian, natural lb. .16½- —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .58 - —
bbls., 1,500-lb. lots lb. .60 - —
kgs., 1,500-lb. lots lb. .61 - —
refd., bgs., 1,500-lb. lots lb. .66 - —
bbls., 1,500-lb. lots lb. .68 - —
kgs., 1,500-lb. lots lb. .69 - —

Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.

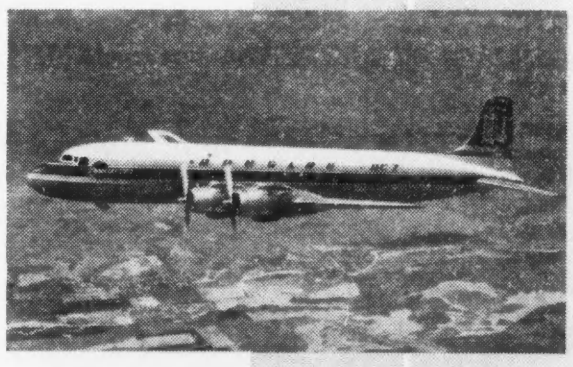
Lemon, No. 1, bgs., 10-bg. lots lb. .58 - .60
No. 2, bgs., 10-bag lots lb. .56 - .58
Superfine, bgs., 10-bag lots lb. .54 - .55
TN, bgs., 10-bag lots lb. .54 - —
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil (see Oil, shingle stain).
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton 25.00 - —
l.c.l., works, exwhse ton 45.00 -55.00
hard-quartz, 99½%, 325 mesh, bgs. c.l., works ton 20.00 - —
l.c.l., works ton 25.00 -30.00
140 mesh, bgs., c.l., works. ton 15.00 - —
l.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .16 - —
l.c.l., works lb. .20 - .28½
Silver bullion, ingots, cs Troy oz. .89¼- —
Cyanide, fib. dms., 2,500-oz. lots. oz. .80¼- —
1,000-oz. lots lb. .80⅜- —
500-oz. lots lb. .80¾- —
100-oz. lots lb. .81 - —
Nitrate, CP, cryst., fib. dms., bots., 2,500-oz. lots oz. .57 - —
bots., 1,000-oz. lots oz. .59¼- —
bots., 500-oz. lots oz. .59¾- —
bots., 250-oz. lots oz. .60¼- —

USP granular silver nitrate 4c. per oz. higher.

Proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.05 - —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 - —
Soapbark, whole, bls lb. .45 - —
crushed, bls., bbls lb. .55 - —
powd., bbls. lb. .55 - —
Soda ash, dense, 58% paper bgs., c.l., works 100 lbs. 1.70 - —
l.c.l., stock points 100 lbs. 2.80 - 4.57
bbls. c.l., works 100 lbs. 2.30 - —
l.c.l., stock points 100 lbs. 3.35 - 4.12
bulk, c.l., works 100 lbs. 1.40 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.65 - —
l.c.l., stock points 100 lbs. 3.75 - 4.52
bbls., c.l., works 100 lbs. 2.20 - —
l.c.l., stock points 100 lbs. 3.25 - 5.52
bulk, c.l., works 100 lbs 1.35 - —
Soda ash, caustic, flake, powd., 76% dms., c.l., works, frt. equald 100 lbs. 4.25 - —
l.c.l. stock points 100 lbs 5.45 - —
liq., 50%, sellers, tanks, works, dry basis 100 lbs. 2.70 - —
rayon-type, sellers' tanks, works, dry basis 100 lbs. 2.70 - —
70% sellers' tanks, works, dry basis 100 lbs 2.80 - —
rayon-type, sellers' tanks, works, dry basis 100 lbs 2.80 - —
solid, 76%, dms., c.l., works 100 lbs. 3.85 - —
l.c.l. stock points 100 lbs 5.05 - —
Sal., bgs., c.l., works 100 lbs. 1.40 - —
l.c.l., works 100 lbs. 1.70 - —
Sodium acetate anhyd., bgs., c.l., works lb .12 —
dms., c.l., works lb. .12¾- —
NF, 60% gran., dms., c.l., works lb. .12½- —
l.c.l., works lb. .14 - —
Alginate, NF, white powd. dms. ton lots, works lb. .87 - 1.30
refd. bbls., works lb. .83 —
p-Aminobenzoate, dms., 1,000-lb. lots or more lb. 2.40 - —
smaller lots lb 2.45 2.50
p-Aminosalicylate, dms., 1,000-lb. lots or more, frt. adjusted lb 3.75 - —
smaller lots, same basis lb 3.80 4.25
Antimoniate, bbls., c.l., dlvd, E lb. .28 - —
l.c.l., dlvd, E lb. .29½- —
Arsenate, dms., c.l., works lb. .12½- —
l.c.l., works lb. .13¾- .14¾
Arsenite, dms., c.l., works lb. .13½- —
l.c.l works lb. .14¼ 15¼
soln., dms., works gal. .70 - 1.10

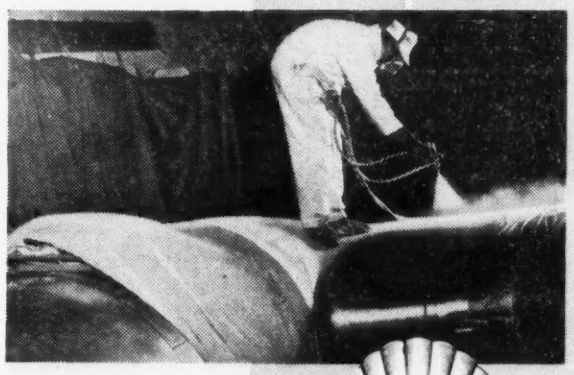

with the help of EPON® RESIN...

**New paint prevents damage by hydraulic fluid, exhaust deposits, weathering on Douglas planes**



Above right

Douglas DC-7, new record-breaking luxury airliner.



Applying Epon resin-based "Cat-A-Lac" to exterior wing section of a Douglas DC-7. Cat-A-Lac is manufactured by Finch Paint and Chemical Co., Torrance, California.

FIRE-RESISTANT hydraulic fluid, widely adopted by the airlines, attacks ordinary paint. Faced with this problem, materials experts of Douglas Aircraft Company began a search for a protective coating that would stand up to synthetic hydraulic fluid, as well as wind and rain, erosion at air speeds of 300-400 mph, and corrosive exhaust deposits.

In several years of investigation, more than 300 formulations were tested. *But only "Cat-A-Lac" formulated from Epon resins,* applied in exhaust path areas, was *100% intact after more than 1000 hours in actual airline service.*

Because of the unusual durability of Epon resin-based coatings, they have been adopted by Douglas and leading airline operators for plane areas exposed to hot exhaust gases, gasoline, hydraulic fluid and cleaning solvents.

Paint users are recognizing these advantages of Epon resin-based formulations — excellent adhesion, resistance to abrasion and impact, ability to withstand extremes of heat, humidity and corrosive atmospheres. Your Shell Chemical representative will explain how Epon resins can improve your own paint and enamel formulations. Write or telephone for the brochures, "Epon Resins for Surface Coatings" and "Epon Resin Esters for Surface Coatings."

*EPON resins are the epoxy polymers made exclusively by Shell Chemical Corporation.*

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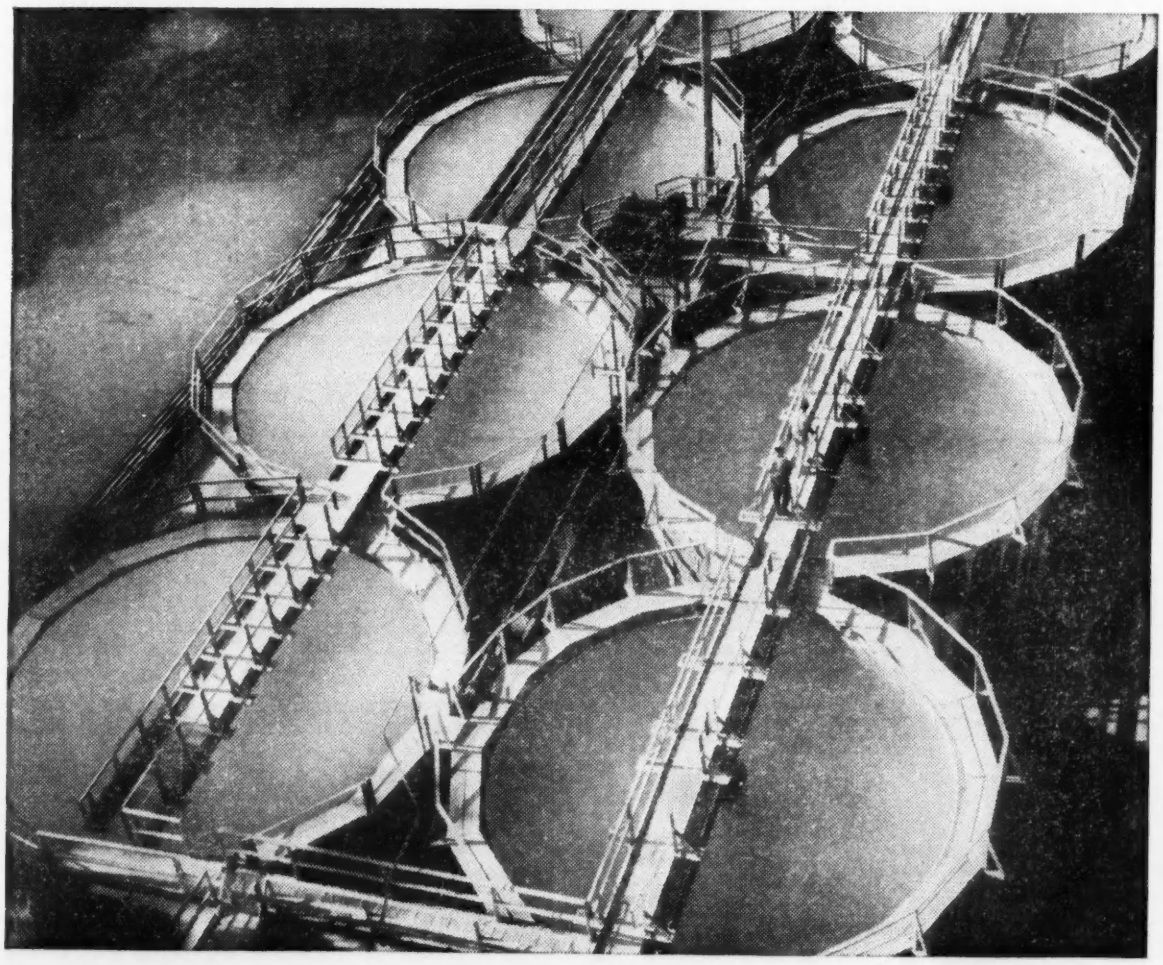
## Sodium Ascorbate—Sodium Sulfate

Sodium ascorbate, dms., 25-50 kilo lots kilo 16.00 - —
10-kilo lots kilo 16.35 - —
5-kilo lots kilo 16.75 - —
1-kilo lots kilo 17.00 - —
bots., 500-gram lots kilo 17.50 - —
Benzoate, tech., bbls., dms., 100-lb lots or more lb. .39 - —
USP, bbls., dms., 100-lb. lots, or more lb. .46 - —
Bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.70 - —
l.c.l., works 100 lbs 3.70 - —
powd., bgs., c.l., works 100 lbs 2.30 - —
l.c.l. works 100 lbs 3.30 - —
Bichromate, bgs., c.l., works lb. .11½- —
l.c.l., works lb. .12 .13¼
Bifluoride, bbls., c.l., works, frt. equaled lb. .17½- —
l.c.l. same basis lb. .1790- —
Bisulfate, bulk, c.l. works 100 lbs. 2.00 —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Bisulfite, anhyd. bgs. c.l. works, 100 lbs. 4.50 - —
l.c.l., works 100 lbs 4.90 - —
soln., 35° bbls., c.l., works, 100 lbs 1.55 - —
l.c.l., works 100 lbs. 2.05 - —
Borate (see Borax).
Bromide, USP, bbls., works lb. .35 - —
Carbonate, annyd. (see Soda ash), cryst., monohydrated (see Soda, sal), monohydrated bgs., c.l., works 100 lbs 2.90 - —
l.c.l., works 100lbs. 3.30 - —
Carboxymethyl cellulose (see CMC).

Sodium chlorate, cryst., dms., c.l., works lb. .08¾- —
l.c.l., works lb. .10¼- .11
Chloride, tech. (see Salt).
USP, bgs. lb. .05 - .12
Chlorite, tech., dms., c.l., works, lb. .58 - —
20-ton lots or more, works, lb. .66 - —
smaller lots, works lb. .70 - .73
Chloroacetate, tech., dms., c.l., works lb. .27 - —
l.c.l., works lb. .28 - —
Chromate, dms., c.l., works lb. .13½- —
l.c.l., same basis lb. .13¾- .15
Citrate, anhyd., dms. lb. .60 - .63
NF VIII, gran., dms lb. .26 - 30½
USP, XVI gran., dms lb. .29½- .34
Sodium citrate, USP, powd. prices 1c. higher.
Cyanate, dms., 1,000-lb., lots, works lb. .85 - 1.10
smaller lots works lb 1.00 - 1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots lb. .178 - —
over 1,000-lb lots lb 183 - —
100-lb to 1,000-lb. lots lb. 198 - —
Granular sodium cyanide 1c higher.
Diacetate, 33-35% acidity, 250-lb. dms. works lb. .14 - —
l.c.l., works lb. .14¾ - —
anhyd., dms., c.l., works lb. 17 - —
l.c.l., works lb. 17¾ - —
Dichromate (see Sodium bichromate)
Ferrocyanide, bgs., 10-ton lots lb. .13½- —
smaller lots lb. .14 - —
Fluoride white, 97%, fib dms., c.l., works, frt. equald lb. .1250- —
l.c.l., works lb .1290- —

Sodium formate, bgs., c.l., works lb. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Gentisate, 100-lb. fib. dms lb. 8.50 - —
Gluconate, refd., dms. lb. .80 - .83
tech., dms lb. .35 - —
Glutamate, mono-, dms., c.l lb. 1.55 - —
Glycerophosphate, NF, cryst., bbls. lb. 2.10 - 2.25
powd., bbls lb 2.15 - 2.30
soln., 75%, cbys. lb. 1.45 - 1.60
Hydride, dms., works lb. 1.30 - 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld. lb. .20 - —
l.c.l., frt. alld lb. .20½- —
Hydroxide, tech. (see soda caustic).
NF pellets, 100-lb dms., 1 to 100-dm. lots lb. .18½- .23
Hypophosphite, NF, dms., ton-lots or less lb. .95 - .98
Hyposulfite, USP (see Sodium thiosulfate),
pea crystals, bgs. 100 lbs. 4.50 - —
gran., bgs., c.l., works 100 lbs. 4.75 5.00
photo grade, bgs., c.l., works, 100 lbs. 4.50 - 4.75
l.c.l., works 100 lbs. 5.00 - 5.05
tech., bgs., works lb. 4.50 - —
l.c.l., works 100 lbs. 4.90 - 6.90
Sodium hyposulfite crystals in bbls., 50c. higher.
Iodide, USP, bots., dms lb. 2.55 - 2.62
Lactate, edible, 50%, cbys., dms., works lb. .21½- —
60% cbys., dms., works lb. .26½- —
tech., 50%, cbys., dms., works, lb. 16¼- —
Lauryl sulfate, dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. .20 - —
Metabisulfite (see Sodium bisulfite).

Sodium metaborate, octahydrate, bgs., gran., bgs., c.l., works ton. 78.50 - —
l.c.l., ex whse ton. 124.50 - 129.50
Sodium metaborate, octahydrate in bbls., $24.50 per ton higher.
Tetrahydrate, bbls., c.l., works, ton. 199.50 - —
Metallic, bricks, 14,000-lb. lots or more, works lb. .17 - .19
less than 14,000-lb. lots, works, lb. .175 - .193
tanks, works lb. .16 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.10 - —
l.c.l., works 100 lbs. 5.45 - 7.35
dms., c.l. 100 lbs. 5.50 - —
l.c.l. 100 lbs. 5.85 - 7.75
Pentahydrate, bgs., c.l., works, 100 lbs. 4.10 —
l.c.l., works 100 lbs. 4.45 - 6.35
dms., c.l., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 5.10 - 5.85
Molybdate, bbls., cbys., works lb. .85 - .95
anhyd., powd., dms., works lb. .85 - .92
cryst., dms., works lb. .70 - —
Monohydrate (see Sodium carbonate, monohydrated).
Naphthionate, bbls lb. .70 - —
Nitrate, crude, dom., bgs., c.l., works ton. 47.00 - —
bulk, c.l., works ton. 43.50 - —
imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton. 51.25 - —
bulk, c.l., same basis ton. 47.75 - —
Nitrite, USP, bbls., c.l., works, frt. equaled lb. .08 - —
l.c.l., same basis lb. .09½- —
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.00 - —
l.c.l., works 100 lbs. 6.35 - 6.75
hydrated, flake, bbls., c.l., works, 100 lbs. 5.25 - —
l.c.l., dlvd 100 lbs. 7.00 - —
Oxalate, 33%, bgs., works 100 lbs. 10.85 - —
Para-aminobenzoate (see sodium p-Aminobenzoate).
Para-ammosalicylate (see Sodium p-Aminosalicylate)
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25½- —
l.c.l., same basis lb. .26½ - .28¼
pellets, bgs., c.l., same basis lb. .23 - —
l.c.l., same basis lb. .26 - .28
powd., bgs., dms., c.l., same basis lb. .24 - —
l.c.l., same basis lb. .25½- .32
Pentachlorophenate, 20,000 lbs. min. truckloads, ¼c. per lb. over carlot prices.
Perborate, NF, tech., bgs., c.l., works lb. .173 - —
l.c.l., works lb. .178 - —
Peroxide, dms., c.l., dlvd, E. of Miss lb. .1860- —
l.c.l., same basis lb. .1910- .1960
Phenolsulfonate, USP IX, gran., dms lb. .44 - .45
powd., dms lb. .47 - .48
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100-lbs. 7.45 - —
100 lbs. 7.45 - —
l.c.l., works 100 lbs. 7.85 - —
USP, dried powd., bgs., dms., works lb. .19 - .20½
monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs. 8.90 - —
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.95 - —
l.c.l., frt. equald 100 lbs. 7.25 - —
tribasic anhyd., bgs., c.l., t.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs. 8.85 - —
cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.20 - —
l.c.l., frt. equald 100 lbs. 4.60 - —
Sodium phosphates in dms., 60c. higher than bgs.
Prussiate, yellow (see sodium ferrocyanide)
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs. 10.75 - —
ferric, dms., 1,500-lb. lots, works, lb. .31 - —
smaller lots, works lb. .32 - —
Pyrophosphate, tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.37½- —
l.c.l., frt. equald 100 lbs. 7.77½- —
Salicylate, USP, dms. lb. .68 - .71
Sesquicarbonate, bgs., c.l., works, lb. 2.10 - —
l.c.l., dlvd., zone 1 100 lbs. 3.85 - 4.10
zone 2 100 lbs. 4.10 - 4.35
zone 3 100 lbs. 4.40 - 4.65
zone 4 100 lbs. 5.10 - 5.35
Sesquisilicate, hydrated, bgs., zone 1, dlvd ton. 120.00 - —
l.c.l., works 100 lbs. 4.95 - 5.35
dms., c.l., works 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.35 - 5.75
Sales zones are: (1) All States E. of Miss. R. and N. of south bound. of Ky. and Va.; Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones: Davenport, Ia. and St. Louis; (2) Ark. E of 93° Ga.; Iowa (except Davenport), Minn.; Mo. (except St. Louis), Neb., E. of 93° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°; N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo., and El Paso, Tex.
Silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works 100 lbs. 1.35 - —
l.c.l., works 100 lbs. 1.70 - 2.20
tanks, works 100 lbs 1.00 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 1.95 - —
l.c.l., dms., works, 100 lbs. 2.35 - 2.80
tanks, works 100 lbs. 1.60 - —
52° Be, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.30 - —
l.c.l., works 100 lbs. 2.65 - 3.15
tanks works 100 lbs. 1.95 - —
solid, 1:3.2, bgs., works ton. 57.50 - —
Silicofluoride, bgs., c.l., works lb. .07 - —
l.c.l., works lb. .07 - .08
Sodium silicofluoride in dms., 4/10c higher
Stannate, dms., works, frt alld. E lb. .544 - .598
Sulfa drugs (see Sulfa name).
Sulfanilate, bbls., works lb. .22 - —
Sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., dlvd., E ton. 32.00 - —
detergent grade, bgs., c.l., works ton. 34.00 - —
rayon grade, bgs., c.l., works, ton. 31.00 - —
USP, cryst., fib. dms lb. .17¼ - .18
gran., fib. dms lb. .17½- .18



# Mathieson Caustic Soda: *why settle for less?*

In the lime-soda process—one of the two important methods of making caustic soda—the causticizing operation begins in huge settling tanks like those above. Here, a soda ash solution is treated with milk of lime, calcium carbonate is precipitated and a dilute caustic liquor obtained. This liquid is then filtered and concentrated to the commercial 50% and 73% solutions, as well as to the solid, flake, and granular forms. Lime-soda process caustic is produced at Lake Charles, La., and Saltville, Va.; four other strategically located plants produce electrolytic process caustic to make Mathieson a major source of this essential chemical raw material.

Multiple-process and multiple-plant facilities give Mathieson's caustic soda customers the dependability they want. It means their source of caustic is not controlled by seasonal fluctuations in chlorine demand as is sometimes the case when production is limited to the electrolytic caustic-chlorine process. This operational flexibility is also typical of other Mathieson chemicals—5 chlorine plants, 7 sulphuric acid plants, 3 alkali plants, 3 ammonia plants, provide a safety factor that assures a reliable source of chemical raw materials.

Call on us when planning current or future chemical requirements. Perhaps you can buy to better advantage from one of America's largest producers of basic industrial chemicals.

MATHIESON CHEMICALS
OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

2761

MATHIESON

CAUSTIC SODA • SODA ASH • CHLORINE • SULPHURIC ACID • SULPHUR • AMMONIA • NITRATE OF SODA • BICARBONATE OF SODA • NITRIC ACID • SULPHATE OF ALUMINA • SODIUM CHLORITE PRODUCTS
ETHYLENE OXIDE • ETHYLENE GLYCOL • DIETHYLENE GLYCOL • TRIETHYLENE GLYCOL • POLYGLYCOLS • DICHLOROETHYLETHER • ETHYLENE DICHLORIDE • METHANOL • SODIUM METHYLATE • ETHYLENE DIAMINE

Sodium sulfide, flake, dms., c.l., works, E., frt. equald..lb. .05¼- —
t.c.l., same basis lb. .05¾- —
fused, bbls., c.l., works, E., frt. equald lb. .04¾- —
t.c.l. same basis lb. .05¼- —
Sulfite, anhyd., bgs., c.l...100 lbs. 3.00 • —
t.c.l. same basis 100 lbs. 3.50 • —
powd., bbls., c.l., works 100 lbs. 7.25 • —
t.c.l. works 100 lbs. 7.50 • —
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06½- —
t.c.l., works lb. .07 • —
liq., 40-44%, tanks, works, 100% basis ton.110.00 • —
Sulfocyanide, CP, (see Sodium thiocyanate).
Tetraborate (see Borax).
Tetrasulfide, liq., 40-75%, dms., c.l., works lb. .03½- —
c.l. works lb. .04 —
Thiocyanate, CP, dms lb. .55 • .65
tech., anhyd., 1 ton lots or more, works lb. .317 • —
less than ton lot, works lb. .337 • —
Thiosulfate, NF, cryst., bbls lb. .12½- —
(see Sodium hyposulphite).
Titanate, etns., c.l., works lb. .10½- —
5-ton lots, works lb. .10¾- —
1-ton or less, works lb. .11 • —
Toluene sulfonate, dms., c.l., or t.l. lb. .38 • —
t.c.l lb. .42 • —
Trichloracetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½- —
t.c.l., frt. adjusted, E lb. .39½- —
50 lb. dms., c.l., frt. alld E. lb. .38 • —
t.c.l., frt. adjusted E lb. .40 • —
10-lb. cns., c.l., frt. alld. E. lb. .44 • —
t.c.l., frt. adjusted E lb. .46 • —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald..100 lbs. 7.72½- —
t.c.l. same basis ....100 lbs. 8.12½- —
Trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 • —
t.c.l. works 100 lbs. 9.40 • 9.80
dms., c.l., works 100 lbs. 9.05 • —
t.c.l. works 100 lbs. 9.80 -10.20
Tungstate, tech., kgs., dlvd. E lb. 1.80 • —
Sodium ammonium phosphate, bbls., works, frt. equald lb. .23 • —
Sodium-carboxymethyl cellulose (see CMC).
Sodium cinchonnen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 • —
t.c.l. same basis lb. .21½- —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .23 • —
smaller lots, same basis lb .30 • —
Solvent naphtha, coaltar, high flash, tanks, works gal. .31 • .35
petroleum (see Petroleum solvent, partial aromatic).
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 • —
10,000 to 20,000-lb. lots, works, lb. .34 • —
smaller lots, works lb. .37 • .39
Tristearate, fib. dms., 20,000-lb. lots works lb. .33 • —
10,000 to 20,000-lb lots, works, lb. .35 • —
smaller lots works lb .38 • .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 • —
1 to 5-ton lots, works lb. .25 • .26
powd., dms., 1 to 5-ton lots, works lb. .38 • .39
soln., comml., aqueous, dms., c.l., works lb. .24¼- —
ton lots works lb. .25 • —
smaller lots, works lb. .25¼- —
tanks works lb. .23¼- —
reg., 70%, aqueous dms., c.l., works lb. .16 • —
ton lots works lb. .16¾- —
smaller lots, works lb. .17 • —
tanks, works lb. .15 • —
Soybean meal, 44%, bulk, Decatur. ton.50.00 -51.00
protein, chemically isolated, bgs., c.l., works lb. .23 • —
mechanically refd., bgs., c.l., works lb. .06 • —
Sparteine sulfate, cns oz. .80 • .85
Spearmint leaves, dom., bls lb. .75 • —
imp., bls lb. 1.25 • —
Spruce, extract, liq., reg. tanks, works lb. .01¾- —
powd., super, bgs., c.l., works, lb. .05¼- —
t.c.l. works lb. .05½- —
Squill, white, bls lb. .17 • .19
powd., bbls., bxs lb. .18 • .21
St. John's bread, edible, bls lb. .13 • .15
Stannic chloride, anhyd., dms., works lb. .757 • .767
Oxide, dms., dlvd. E lb. .93½- .94½
Stannous chloride, anhyd., dms., works lb. .811 - 1.080
Hydrous (crystals), dms., works, works lb. .76½- .77½
Sulfate, dms., works lb. .929 - .949
Starch, corn, pearl, paper bgs., c.l. 100 lbs. 7.14 • —
t.c.l. 100 lbs. 7.29 • —
powd., paper bgs., c.l..100 lbs. 7.26 • —
t.c.l. 100 lbs. 7.41 • —
Prices for corn starch in cotton bags, 25c. per 100 lbs. higher.
Potato, dom., Idaho, bgs., c.l., works lb. .06¾ Nom.
Maine, bgs., c.l., works lb. .07¼ Nom.
t.c.l., spot lb. .09 • .09½
Rice, bgs., t.c.l. lb. .15½- .16
Wheat, bgs. lb. .0755- .0780
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. .60 • .61
Stearine oleo (see Oleostearine.)
Stomach substance, not USP, 100-lb. fib. dms. lb. 2.80 • —
Stramonium leaves, bgs lb. .18 • .20
Streptomycin hydrochloride, bulk, gram. .09 • —
Strontium bromide, NF, cns., dms. lb. .77 • .78
Carbonate, pure, dms., 5-ton lots or more, works. lb. .35 • —
1-ton lots, works lb. .37 • —
tech., dms., works lb. .19 • —
Chromate, bbls., works lb. .46 • —
Iodide, jars, 25-lb. lots lb. 3.42 • —
Nitrate, bbls., c.l., works..100 lbs. 11.00 • —
t.c.l., works 100 lbs. 12.00 • —
Salicylate, NF, dms lb. 1.65 • —
Sulfate, air floated, 90%, 325 mesh, bgs., works..ton.56.70 -66.15
Strophanthin, K, bots oz.25.00 -25.50
G, (see Ouabaine, USP).
Strophanthus seed, Kombi, biologically tested, bgs. lb. 3.50 • 3.75
Styrax, USP, cs lb. .78 • .80
Strychnine, NF, powd., cns., 100-oz. lots oz. 1.10 • —
Phosphate, NF, cns., 100-oz. lots.oz. 1.14 • —
Sulfate USP, cryst., cns., 25-oz. lots oz. .96 • —
powd., 100-oz. lots oz. .85 • —
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. equald. lb. .22¼- —
t.c.l., same basis lb. .23¼- —
tanks, same basis lb. .21 • —
synthetic rubber grade, 99%, dms., c.l., frt. equald..lb. .19¼- —
t.c.l., same basis lb. .20¼- —
tanks, same basis lb. .18 • —

Styrolyl acetate, bots lb. 1.45 - 1.70
Sucrose, crude, bgs., works lb. .0553- —
refd., white, bgs., refy., E lb. .0655- —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., t.c.l., works, lb. .76 • —
Sugar, raw (see Sucrose, crude).
Sulfabenzamide, dms lb. 4.00 - 4.50
Sodium, dms lb. 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
Sodium fib. dms lb. 5.00 - 5.20
Sulfadiazine, USP, microcrystals, dms lb.10.60 -11.10
powd., dms lb.10.25 -10.75
Sulfadiazine-sodium, USP, dms lb.11.25 -11.75
microcrystals, dms. lb.11.60 -12.10
Sulfaguanidine, USP dms lb. 2.50 —
Sulfamerazine, USP, microcrystals, lb.10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb.11.25 -11.75
Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
powd., dms lb. 8.50 - 9.00
Sulfanilamide, USP, 30-80 mesh., dms lb. 1.40 - 1.60
microcrystals, dms lb 1.70 - 1.90
powd. dms lb. 1.30 - 1.50
Quinoxaline, veterinary, dms lb. 6.40 - 6.75
Sulfapyridine, NF powd. bots. tins, lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, USP, microcrystals, dms lb. 2.85 - 3.00
powd., dms lb. 2.50 - 2.65
Sulfathiazole-sodium, USP, dms. lb. 2.75 - 2.90
Sulfur, comml., flour, bgs., mines, 100 lbs. 2.30 • —
bbls., mines 100 lbs. 3.05 • —
lump, bgs., mines 100 lbs. 2.20 • —
bbls., mines 100 lbs 2.65 • —

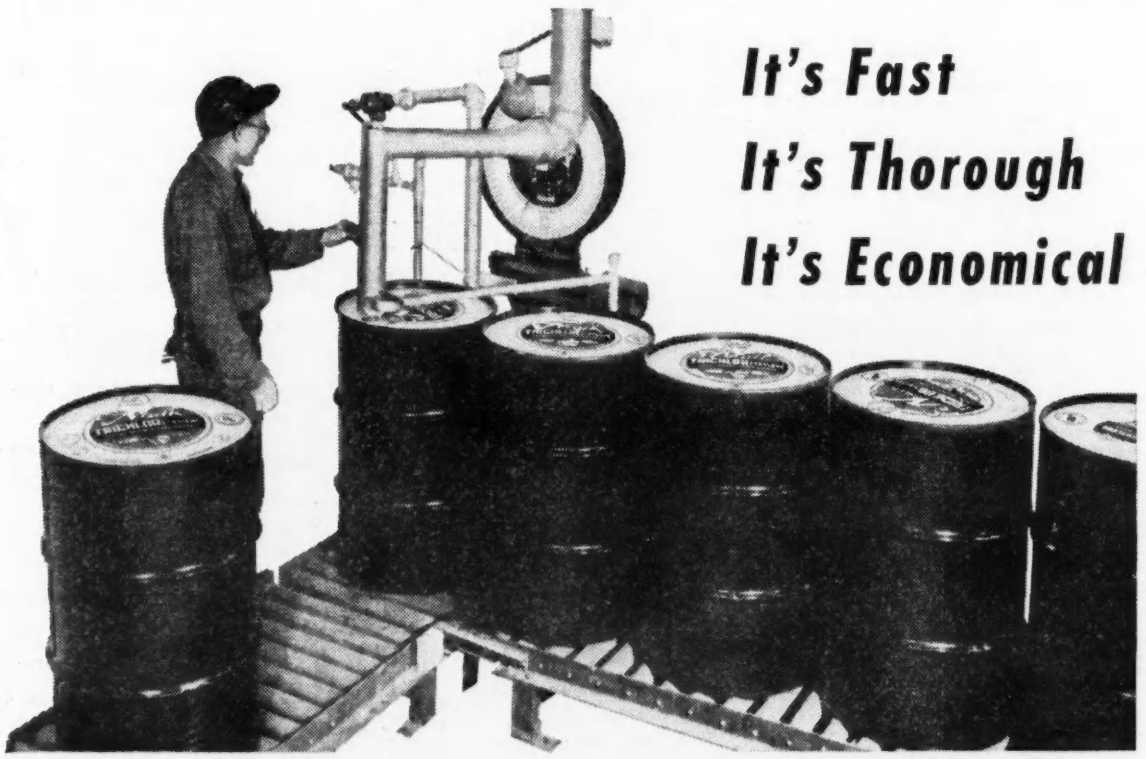
Sulfur, crude, bulk, c.l., mines, contract long-ton.26.50 • —
export, f.o.b. vessels, Gulf ports long-ton.31.00 -33.00
domestic and Canada, f.o.b. vessel Gulf port long-ton.28.00 -29.50
refd., flowers, USP, bgs., mines 100 lbs. 4.00 • —
bbls. 100 lbs. 5.25 • —
flour, light, bgs., mines 100 lbs. 3.60 • —
bbls., mines 100 lbs. 4.50 • —
lump, bgs., mines 100 lbs. 3.30 • —
rolls, bgs., mines 100 lbs. 3.65 • —
bbls., mines 100 lbs. 4.40 • —
salt block, bgs., mines 100 lbs. 3.50 • —
virgin block, bbls., mines 100 lbs. 3.45 • —
rubbermakers, coml., reg., bgs., mines 100 lbs. 2.40 • —
bbls., mines 100 lbs. 3.55 • —
98-100% passing through 325 mesh, bgs., mines 100 lbs 2.50 • —
bbls., mines 100 lbs. 3.65 • —
refd., bgs., mines 100 lbs. 3.25 • —
bbls., mines 100 lbs. 4.30 • —
treated, 2.5% mineral oil, bgs., mines 100 lbs 2.70 • —
bbls., mines 100 lbs. 3.85 • —
10% pine tar, bgs., mines, 100 lbs. 3.90 —
Dichloride, dms., c.l., works, frt. equald lb. .03¾- —
t.c.l. same basis lb. .04½- —
tanks, same basis lb. .03½- —
Dioxide, liq. coml., cyls., works, frt. equald lb. .10 .12
multi units cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration cyls., dlvd lb. .27 • —

## Sodium Sulfide—Talc

Sulfur, monochloride, 55-gal., dms., c.l., frt. equald lb. .03¾- —
t.c.l. same basis lb. .04½- —
tanks same basis lb. .03½- —
Sumac leaves, 28%, bgs., ex-dock, ton.132.00 • —
ground, bgs., ex-dock ton.127.00 • —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto., unit-ton. .88 .91
Carteret, N. J. unit-ton. .88 • .91
triple, 48% or more, a.p.a., pulv., bulk, c.l., East Tampa, Fla. unit-ton. .98 • —

## T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.25 • —
t.c.l., same basis lb. 1.30 • 2.30
Isopropyl ester, dms., c.l., works, frt. equald lb. 1.30 • —
t.c.l., works lb. 1.35 • —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton.32.00 -38.50
Vermont off color grd., bgs., c.l., works ton.18.40 • —
t.c.l., works ton.36.00 • —
fibrous, New York, grd., bgs., c.l., works ton.27.00 -32.00
t.c.l., works ton.30.00 -35.00
99.5%, 325 mesh, bgs., c.l., works ton.30.00 • —
t.c.l., works ton.33.00 • —
99.95% micronized, bgs., works ton.37.00 • —
imp., Canadian, grd., bgs., c.l., mines ton.20.00 -35.00

It's Fast
It's Thorough
It's Economical

It's your Best Buy in Degreasing Agents!

Nialk® TRICHLORethylene

When you stack up all the advantages offered by Nialk TRICHLORethylene you'll understand why more and more companies are standardizing on it for metal parts degreasing.

**Versatile**—the ideal organic solvent for removing practically every kind of foreign matter—waxes, greases, oils, gums, tars—even chips. Leaves parts clean, warm, dry, ready for assembly, inspection or surface treatment.

**Fast**—Acts quickly, cleans and dries rapidly. Its low boiling point (86.6°-87.8°C, based on standard ASTM tests) permits vaporization at low steam temperatures.

**Thorough**—Low viscosity (0.58 centipoises at 20°C) and low surface tension (about 29 dynes per cm at 30°C) assure diffusion into pores and relatively inaccessible openings.

**Economical**—Stable and completely usable after distillation. Cuts power consumption . . . can be heated by gas, steam or electricity. Gives concentrated vapor at only 188°F. Specific heat is less than ¼ that of water. Cuts vapor loss—high vapor density (4.5 times that of air) assures proper vapor level at all times.

**Safe**—Has neither flash point nor fire point; classed as nonflammable at room temperatures, only moderately flammable at higher temperatures (Underwriters' Laboratories rating 3).

**Order by the drum, carload or tank car. Deliveries can be made promptly. A request on your letterhead will bring you a free copy of our Nialk TRICHLORethylene booklet.**

NIAGARA ALKALI COMPANY
60 East 42nd Street
New York 17, New York

NIALK® Liquid Chlorine • NIALK Caustic Potash • NIALK Carbonate of Potash
NIALK Paradichlorobenzene • NIALK Caustic Soda • NIALK TRICHLORethylene
NIAGATHAL® (Tetrachloro Phthalic Anhydride)

## Tallow, Edible—Yohimbine Hydrochloride

Tallow, edible, tanks, dlvd ..... lb. .10¾ - —
inedible, extra, tanks, dlvd .... lb. .07 - —
fancy, bleachable, tanks, dlvd. lb. .07¼ - —
No. 1, tanks, dlvd ..... lb. .03½ - —
special tanks, dlvd ..... lb. .03½ - —
sulfonated, 25%, bbls., l.c.l. lb. .07¾ - .08
50%, bbls., l.c.l. ..... lb. .09 - .10
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 5.00 - —
Chicago ..... unit-ton. 5.00 - —
Tapioca flour Brazilian, ex whse, bgs lb. .07¾ - .08½
Siamese, top grade, ex whse lb. .07½ - .07¾
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 .49
l.c.l., same basis gal. .50 .51
tanks same basis gal. .39 —
25-28% dms. c.l. same basis. gal. .54 .56
l.c.l. same basis gal. .57 .58
tanks, same basis gal. 46 —
50-53% dms. c.l. same basis. gal. .70 .72½
l.c.l., same basis gal. .73½ .74½
tanks, same basis gal. .62½ —
Coal (see Coaltar)
Tartar, emetic (see Antimony-potassium tartrate).
Terpine glycol ether, dms., c.l., works lb. .23½ —
l.c.l., works lb. .25¼ —
tanks, works lb. .22 —
Hydrate, NF, cryst., powd., fib. dms lb. .67½ 74
a-Terpineol, dms, l.c.l., dlvd & lb. 19 —
Terpineol, coml., dms., c.l., South. lb. .13½ —
l.c.l., South ..... lb. .14 - 60
extra dms ..... lb. 41 60
prime, dms ..... lb. .30 45
Terpinyl acetate, extra, cns., dms. lb. .60 75
prime, dms ..... lb. .55 70
Propionate, dms. ..... lb. 1.75 2.00
Terra alba, (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gram. 70 - —
Propionate, USP, 100-gm. lots, bots gram. .68 - —
Tetrachloroethane, dms., works lb. .14½ - —
Tetrachloroethylene, tech. (see Perchloroethylene).
USP, 55 gal. dms., works .... lb. .20½ - 21½
smaller dms., works ..... lb. .23½ .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .64 - —
l.c.l., dlvd. E lb. .65 - —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .69 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .57½ - —
l.c.l., dlvd. E ..... lb. .58½ - —
tanks, dlvd E ..... lb. .56 - —
Tetrapotassium phosphate (see Potassium phosphate)
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Thallium metal, dlvd ..... lb 12.50 -15.00
Sulfate 99%, bots, dlvd ..... lb 8.00 -13.00
Theobromine, NF, fib, dms ..... lb. 3.75 —
And sodium acetate USP, fit, dms lb. 4.05 4.10
Sodio-Salicylate, NF, fib dms lb 3.35 3.40
Theophylline, anyhd or USP, 100-lb. dms lb 3.65 - —
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms. kilo 100.00 - —
Mononitrate, USP, fib. dms kilo.100.00 - —
Thiocarbanilide, dms ..... lb. .50 - .52
Thiodiphenylamine (see Phenothiazine).
Thiourea, tech., dms., c.l., works lb. .40 - —
l.c.l., works lb. .42 - —
Thorium nitrate, purit., fib. dms., 100-lb. lots or more, works lb. 3.50 —
dl-Threonine, bots., 1-kilo lots kilo.450.00 500.00
Thyme leaves, French, bgs ..... lb 20 —
Spanish, bgs ..... lb .09 - —
Thymol, fib, dms ..... lb 2.50 - 2.65
Iodide, NF, dms ..... lb 7.30 —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhydrous)
crystals (see Stannous chloride, hydrous)
Metal (Straits) ..... lb. .95 - —
Oxide (see Stannic oxide)
Sulfate (see Stannous sulfate).
Tetrachloride anhyd (see Stannic chloride, anhydrous)
Titanium dioxide anatase, chalk resistant, bgs, c.l., dlvd lb. .22½ —
l.c.l. dlvd. ..... lb. .23½ —
ceramic, bgs., c.l., dlvd ..... lb. .22½ —
l.c.l. dlvd. ..... lb. .23½ —
reg., bgs., c.l., dlvd ..... lb. .22½ —
l.c.l. dlvd ..... lb. .23½ —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla ton.120.00 - —
Niagara Falls, N. Y., c.l., ton.137.50 - —
5-ton lots, same basis ton.142.50 - —
ton lots, same basis, c.l. ton.147.50 - —
rutile, non-chalking, bgs., c.l., dlvd E lb. .24½ —
l.c.l. dlvd. E ..... lb. .25½ —
Milled titanium dioxide $7.50 per ton higher.
Hydride, cns., works ..... lb. 7.95 - 9.00
Pigment, calcium-rutile base, bgs., c.l., dlvd lb. .08¾ - —
l.c.l. dlvd ..... lb. .09¾ - —
Tetrachloride, tech., dms., c.l., works lb. .40¾ - —
l.c.l. works ..... lb. .43¾ - —
tanks, works ..... lb. .39¾ - —
dl-a-Tocopherol, bots ..... kilo.149.65 - —
Acetate, bots ..... kilo 136.00 - —
o-Tolidine base dist., kgs ..... lb 1.30 - —
Tolu balsam, cns ..... lb 4.25 4.50
Toluene (see Toluol).
p-Toluenesulfonamide, flake, dms., frt. alld lb. .64 - .66
powd. dms., works ..... lb. .70 - —
solid, dms., frt. alld ..... lb. .61 - —
m-Toluidine, dms. c.l. works, frt. alld lb. .79 - —
l.c.l. same basis ..... lb. .80 - —
tanks, same basis ..... lb. .78 - —
o-Toluidine, dms. c.l. works, frt. alld lb. .23 - —
l.c.l., same basis ..... lb. .24 - —
tanks, same basis ..... lb. .22 - —
p-Toluidine, flake, dms, frt. alld lb. .64 - —
solid, dms., frt. alld. lb. .60 - .61
Toluol, coaltar, indust or nitration, tanks, works:—
Bethlehem, Pa. .... gal. .34 - —
Birmingham dist. .... gal. .32 - —
Chicago dist ..... gal. .35 - —
Cleveland dist. ..... gal. .32 - —
Geneva, Utah ..... gal .26 - —
Johnstown, Pa. ..... gal. .32 - —
Lackawanna, N. Y. .... gal. .35 - —
Lone Star, Tex ..... gal. .33 - —
Lorain, Ohio ..... gal. .32 - —
Middletown, Ohio .... gal. .33½ - —
Minnequa, Colo. .... gal. .32 - —
Philadelphia district. .. gal. .34 - —
Pittsburgh dist ..... gal. .32 - —
Sparrow's Point, Md .... gal. .34 - —
Terre Haute, Ind ..... gal. .35 - —
Youngstown, Ohio .... gal. .32 - —
Toluol, petroleum, indust., 2° tanks, works:—Albany, N. Y. gal. .35 - —
Bayonne, N. J. ..... gal. .34 - —
Baytown, Tex. ..... gal. .33 - —
Chicago, Ill. ..... gal. .35 - —
Detroit, Mich ..... gal. .35 - —
Houston, Tex ..... gal. .33 - —
Philadelphia, Pa. ..... gal. .34 - —
Providence, R. I. ..... gal. .35 - —
Wood River, Ill. ..... gal. .35 - —
2,4-Tolylenediamine, cryst., fib., dms. frt. alld lb. .94 - —
powd., same basis ..... lb 1.00 - —
Tonka beans, Angostura, cks ..... lb 1.65 - 1.80
Brazilian, Surinam, cs ..... lb 1.00 - 1.25
Totaquine, 100-oz. lots, cns ..... oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .20 - —
l.c.l., t.l.l., works ..... lb .26 - —
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
l.c.l. same basis ..... lb. .40 - —
tanks, same basis ..... lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld E of Denver lb. .42 - —
l.c.l., frt. alld E of Denver. lb. .43 - —
tanks, frt. alld E of Denver. lb. .40 - —
Phosphate, dms., c.l., works lb. .52 - —
l.c.l. same basis ..... lb. .53 - —
tanks, same basis ..... lb. .50 - —
Tributylamine, cms., c.l., works lb. .67 - —
l.c.l., same basis ..... lb. .68 - —
tanks, same basis ..... lb. .65 - —
Trichlorobenzene, dms., c.l., works, frt. alld E lb. .14½ - —
l.c.l., frt. alld. E ..... lb. .15½ - —
tanks, frt. alld. E ..... lb. .13 - —
Prices in the West 1¾c. higher.
Trichloroethylene, dms, c.l. or t.l., works frt. equald lb. .11¼ - —
l.c.l., dlvd. E lb. .13¼ - —
tanks, works, frt. equald lb. .10¼ - —
Trichloroethane, dms, c.l., works. lb. .13 - —
l.c.l. works ..... lb. .13½ - —
tanks, works ..... lb. .11½ - —
Tricholine citrate, 65% soln., ret. chys., works, frt adjusted lb. 1.40 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
l.c.l. dlvd. ..... lb. .36 - —
tanks, dlvd ..... lb. .33 - —
petroleum dms., c.l., dlvd lb. .35 - —
l.c.l. dlvd. ..... lb. .36 - —
tanks, dlvd. ..... lb. .33 - —
Triethanolamine, dms., c.l. dlvd. E lb. .24 - —
l.c.l., same basis ..... lb. .25 - —
tanks, same basis ..... lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 - —
l.c.l. same basis ..... lb. .48 - —
tanks, same basis ..... lb. .45 - —
Triethyl citrate, refd., tech., non-ret dms., c.l., frt. alld. E. of Denver lb. .45¾ - —
l.c.l., frt alld. E of Denver. lb. .46¾ - —
tanks, frt. alld. E. of Denver. lb. .43¾ - —
Phosphate, dms., c.l., works lb. .53 - —
l.c.l., same basis ..... lb. .59 - —
tanks, same basis ..... lb. .57 - —
Triethylene glycol, dms, c.l. dlvd E. lb. .20½ - —
l.c.l., same basis ..... lb. .21½ - —
tanks, same basis ..... lb. .18½ - —
Triethylenetetramine, dms, c.l., dlvd E lb. .48½ - —
l.c.l. dlvd E ..... lb. .49½ - —
tanks, dlvd E ..... lb. .47 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .22¾ - —
l.c.l., dlvd. E ..... lb. .23¾ - —
tanks, dlvd. E ..... lb. .20¾ - —
Trimethylamine, 25-30% soln., dms., c.l., works, frt equald., 100% basis lb. .42 - —
l.c.l. works frt. equald. 100% basis lb. .42½ - —
tanks works frt equald. 100% basis lb. .33 - —
Tripentaerythritol, bgs, l.c.l., works. lb. .35 - —
Triphenyl phosphate, bbls, c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .40 - —
Triphenylguanidine, bbls, works in. .90 - —
Tripropylene glycol, dms, c.l., frt. alld E lb. .20½ - —
l.c.l., frt. alld. E lb. .21½ - —
Prices 1c per lb higher in West.
Trisodium fluoroacetate (see Sodium fuloroacetate, tribasic).
Phosphate (see Sodium phosphate tribasic).
Trypsin, pharmaceutical 1-2% dms., works lb. 6.25 - —
dl-Tryptophane, fib cns. works. kilo.165.00 - —
Tungsten metal powd. 98.8% dms., dlvd lb. 4.35 - 4.40
Turpentine, gum (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots gram. .75 - .85

## U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, dom., 46% N, bgs., c.l., t.l., Zone 1, dlvd. ton.120.00 - —
l.c.l., Zone 1, ex whse ton.140.00 - —
45% N, bgs., c.l., (30 tons), zone 1, dlvd ton.137.00 - —
Zone 2, dlvd. ..... ton.133.00 - —
Zone 1 prices are basis delivered Kan., Neb., N. Dak., Okla., S. Dak., Tex. and E.
Zone 2 prices include all states west of Zone 1.
Urea ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va ton.128.00 - —
C grade, tankcars, same basis. ton 126.50 - —
37 grade tankcars, same basis. ton 155.50 - —
Urethane, USP, dms ..... lb. 1.50 - —
Uva ursi leaves, bls ..... lb. .12 - .14

## V

Valerian root, Belgian, bgs ..... lb 28 40
dl-Valine, dms, works ..... lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., exdock ton.66.00 -68.00
cups, 28-30% tannin, bgs., ex-dock ton.46.00 -48.00
extract, powd., 63% tannin, bgs., ex-dock, duty extra lb. .08 - .08¼
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins .... lb. 8.00 - 8.50
Mexican, cuts, tins ..... lb. 9.00 - 9.50
whole, tins ..... lb. 9.75 -10.00
Tahiti, cs. ..... lb. 7.00 - 7.50
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 - 6.75
smaller lots ..... lb. 6.80 - 7.25
ex guaiacol, tins, 25-lb. lots .. lb. 3.00 - —
smaller lots ..... lb. 3.05 - 3.15
ex lignin, tins, 25-lb. lots ..... lb. 3.00 - —
smaller lots, tins ..... lb. 3.05 - 3.15
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .18½ - —
l.c.l., dlvd. E ..... lb. .19½ - —
tankcars, dlvd. E ..... lb. .16½ - —
tanktrucks, dlvd. E ..... lb. .17½ - —
n-Butyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works ..... lb. .30 - —
tanks, works ..... lb. .27 - —
Chloride monomer, tanks, frt. equald lb. .10½ - —
Ether, USP, anesthesia, bots., 50 c.c., hospitals, bot. 1.12 - —
75 c.s. ..... bot. 1.56 - —
Ethyl ether, tech., dms., c.l., works. lb. .26 - —
l.c.l., works ..... lb. .28 - —
tanks, works ..... lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l. works ..... lb. .30 - —
tanks, works ..... lb. .27 - —
Methyl ether, cyls., works ..... lb. .23 - —
tanks, works ..... lb. .20 - —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.
Trichloride (see Trichloroethane).
2-Vinylpyridine, dms., works lb. 1.40 - 1.50
Vinyltoluene, dms., c.l., works lb. .20¼ - —
l.c.l. works ..... lb. .21¼ - —
tanks, works ..... lb. .19 - —
Viosterol, in alcohol, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .025 - —
lots of 1 billion USP units, 1,000,000 units. .03 - —
lots of less than 1 billion USP units 1,000,000 units. .035 - —
in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02 - .04¾
lots of 1 billion USP units, 1,000,000 units. .025 - .05¼
lots of less than 1 billion USP units, 1,000,000 units. .03 - .05¾
Vitamin A acetate, syn., crystalline, beads 500,000 A units per gram gram. .07¼ - —
dry, 500,000 units per gram. kilo lots kilo.72.50 - —
325,000 units per gram, same basis kilo47.10 - —
250,000 units per gram, same basis kilo.36.25 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram 1,000,000 units. .12 - —
Palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .12 - —
in oil, 1,000,000 A units per gram 1,000,000 units. .12 - —
B, (see Thiamine hydrochloride).
$B_2$, (see Riboflavin).
$B_6$ complex, natural (see Rice bran concentrate and Yeast).
$B_{12}$, (see Pyrodoxine hydrochloride).
$B_{12}$, crystalline, 1-gram or 5-gram vials gram.245.00 - —
oral grade solids, in containers of 1 and 5 grams of $B_{12}$ activity gram.185.00 - —
C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver, Calciferol, and Viosterol).
$D_2$, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
less than kilo lots kilo.45.00 - —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin).
K, Active (see Menadione).
$K_1$, 25 gram bots ..... gram. 4.50 - —
Violet methyl toner (see Blue methylviolet toner
V.M.&P. naphtha (see Petroleum naphtha).

## W

Wahoo root, bark, bls ..... lb. 2.50 Nom.
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
25-49-lb. lots, N. Y. or Chicago, lb. 2.05 - —
5-24-lb. lots, cns., N. Y. or Chicago lb. 2.15 - —
Wattle bark, fair average, African, bales, ex dock ton.99.00 - —
merchantable, bales, ex dock.ton.95.00 - —
extract, liq., 35% tannin, bbls., lb. .09¾ - .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .09¾ - —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb. .10 - —
Wax, amorph, (see Wax microcrystalline).
Bayberry, bgs., spot ..... lb. .40 - .43
Bees, crude, African, bgs ..... lb. .65 Nom.
Brazilian, bgs. ..... lb. .67 Nom.
Central American, bgs ..... lb. .64 - .65
Chilean, bgs. ..... lb. .67 Nom.
refd., USP, bleached, white bricks lb. .74 - .76
slabs ..... lb. .73 - .75
yellow, bricks ..... lb. .67 - .68
slabs ..... lb. .66 - .67
Candellila, crude, bgs ..... lb. .62 - .64
refd., bgs ..... lb. .63 - .65
Powdered candellila, 20 mesh, 7c. per lb. higher, 80 mesh, 7c.; 100-200 mesh, 8c.
Carnauba, chalky, bgs., ton lots lb. .56 - .58
North country No. 2, bgs., ton lots lb. .68 Nom.
No. 3, Ceara, crude, bgs., ton lots lb. .57 - .59
refd., pure, bgs., ton lots lb. .65 - .66
tech., bgs., ton lots lb. .62 - .63
Parnahyba, crude, bgs., ton lots lb. .62 - .64
yellow, No. 1, Ceara, bgs., ton lots lb. .94 - .96
Parnahyba, bgs., ton lots, lots lb. 1.01 - 1.03
Powdered carnauba wax price differentials same as powdered cas-lelilla.
Japan, bgs ..... lb. .42 - .44
Microcrystalline, 170-175°F., m.p., ASTM, penetration 15-20, cns., 20,000 lbs., group 3, works lb. .13 - .14
smaller lots, same basis, lb. .14 - .15
black, cns., 20,000 lbs., same basis lb. .11½ - .12¼
smaller lots, same basis, lb. .12½ - .13¼
white, cns., 20,000 lbs., same basis lb. .24 - .25
smaller lots, same basis, lb. .26 - .26
Wax, microcrystalline 180°-185°F, m.p., ASTM, penetration, 7-11; amber, cns., 20,000-lb. lots, same basis ... lb. .16 - —
smaller lots, same basis, lb. .17 - —
black, cns., 20,000 lbs., same basis lb. .14½ - —
smaller lots, same basis, lb. .15½ - —
white, cns., 20,000 lbs., same basis lb. .27 - —
smaller lots, same basis, lb. .28 - —
190°-195°F., m.p., ASTM, penetration 2-7, amber, cns., 20,000 lbs., same basis lb. .20 - —
smaller lots, same basis, lb. .20½ - —
black, cns., 20,000 lbs., same basis lb. .18 - —
smaller lots, same basis, lb. .18½ - —
white, cns., 20,000 lbs., same basis lb. .33½ - —
smaller lots, same basis, lb. .34½ - —
Montan, dom., refd., bgs. ..... lb. .30 - .32
imp., crude, Bohemian, bgs lb. No prices.
German, bgs. ..... lb. No prices.
Ouricury, refd., pure, bgs ..... lb. .95 - .97
tech., bgs ..... lb. .85 - .87
Paraffin (see P).
Spermaceti, blocks, cs. ..... lb. .25½ - .31
cakes, cs ..... lb. .26½ - .32
Sugar cane, dom., refd., slabs, works lb. .65 - .75
spot ..... lb. .67¼ - .72¼
White lead (see Lead, white).
White pine bark, rossed, bls ..... lb. 16 - .19
White precipitate, USP, powd., dms. lb. 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls. lb. .14 - .19
rossed, bls ..... lb. .19 - .23
Witch hazel bark, bls ..... lb. .16 - .17
leaves, bls. ..... lb. .20 - .21
Wollastonite, fine, bgs., c.l., works. ton.39.50 - —
l.c.l. ex whse ..... ton 56.00 - —
medium, bgs., c.l., works .... ton.27.00 - —
l.c.l., ex whse ..... ton.44.00 - —
Woolfat, crude (see Degras).
USP (see Lanolin)
Wormseed, American, bgs ..... lb .20 - .25
Levant, bgs ..... lb 4.25 - 4.50

## X

Xylene (see Xylol).
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
56°-58°C., dms. l.c.l., works, frt. equald lb. .50 - —
45°-47°C., dms., c.l., same basis. lb. .212 - —
l.c.l., same basis ..... lb. .215 - —
tanks, same basis ..... lb. .199 - —
fractions, b.r. 7-9°C., dry above 227°C., dms., c.l., same basis gal. .96 - —
l.c.l., same basis .... gal. .99 - —
tanks, same basis .... gal. .85 - —
dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
l.c.l., same basis .... gal. 1.14 - —
tanks, same basis .... gal. 1.00 - —
Xylidines, mixed, dms., c.l., truckload, works lb. .39 - —
l.c.l., same basis ..... lb. .40 - —
tanks, same basis ..... lb. .38 - —
Xylol, coaltar, indust., tanks, works, Bethlehem, Pa. .... gal. .34 - —
Birmingham district .... gal. .32 - —
Chicago district ..... gal. .35 - —
Cleveland district .... gal. .34½ - —
Geneva, Utah ..... gal. .27 - —
Johnstown, Pa. ..... gal. .33 - —
Lackawanna, N. Y. .... gal. .35 - —
Lone Star, Tex ..... gal. .33 - —
Lorain, Ohio ..... gal. .33 - —
Middletown, Ohio .... gal. .34 - —
Minnequa, Colo ..... gal. .34 - —
Philadelphia district .... gal. .34 - —
Pittsburgh district .... gal. .32 - —
Sparrows Point, Md .... gal. .34 - —
Terre Haute, Ind ..... gal. .35 - —
Youngstown, O ..... gal. .32½ - —
petroleum, indust., tanks, works:—Bayonne, N. J. ..... gal. .34 - —
Baytown, Tex. ..... gal. .33 - —
Chicago, Ill. ..... gal. .35 - —
Philadelphia, Pa. .... gal. .34 - —
Providence, R. I. ..... gal. .35 - —
Wood River, Ill. ..... gal. .35 - —

## Y

Yara vara, cns ..... lb 2.15 - 2.65
Yeast, brewer's, dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. .47 - —
90 Int'l B units per gram, 100-lb dms lb. .52 - —
200 Int'l B units per gram, 100-lb dms lb. .56 - —
300 Int'l B units per gram, 100-lb dms lb. .60 - —
Yellow, barium chromate, CP, bbls., dlvd. N. l.c.l., dlvd N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb. 35 - —
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.
Benzidine AAA, bbls., dlvd. lb. 2.00 - —
AAOT, bbls ..... lb 2.25 - —
Lightfast, bbls. ..... lb. 3.15 - —
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies lb. 2.35 - —
lithopone, all shades, bbls., frt. alld., E. of Rockies lb 1.15 —
Cadmium yellows, Los Angeles and San Francisco, ex whse., 2c. per lb. higher.
Chrome, CP, bbls, dlvd. N. Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .32 - —
Dlvd. Ala., Fla., Ga., La. (Shreveport 1½c. higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Hansa 10 G, bbls., same basis as yellow, chrome lb. 2.15 - —
G pigment, bbls ..... lb. 1.91 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .05¼ - —
Peruvian type, bgs., l.c.l lb. .038 - —
pure, bgs., c.l., works ..... lb. .11 - —
l.c.l., works ..... lb. .11¼ - —
Mercury oxide, bbls., 1,000-lb. lots lb. 5.58 - —
smaller lots ..... lb. 5.60 - —
Ocher (see Yellow, iron oxide, natural).
Zinc (chromate), bbls., dlvd ... lb. .26 - —
basic, dlvd ..... lb. .31 - —
Yerba santa leaves, bls ..... lb. .40 - .42
Yohimbine hydrochloride, bots, tin. oz. 4.50 - —

## Z

| | | | |
|---|---|---|---|
| Zein, bgs., 36,000-lb. lots or more | lb. | .38 | — |
| 1,000 to 36,000-lb. lots, works | lb. | .40 | — |
| smaller lots, works | lb. | .43 | — |
| Zinc acetate, NF VIII, dms. | lb. | .53 | — |
| tech., dms., works | lb. | .27 | — |
| Borate, bgs., c.l., dlvd. E | lb. | .192 | — |
| l.c.l., dlvd. E | lb. | .202 | — |
| Chloride, NF, gran., dms. | lb. | .42 | — |
| precipitated powd. dms | lb. | .26 | — |
| soln., 50%, dms., c.l., works, 100 lbs. | | 5.50 | — |
| l.c.l., works | 100 lbs. | 6.10 | — |
| tanks, works | 100 lbs. | 4.85 | —.. |
| tech., fused, dms., c.l., works, 100 lbs. | | 10.10 | — |
| l.c.l., works, dms. | 100 lbs. | 10.60 | — |
| gran., fib., dms., c.l., works 100 lbs. | | 10.85 | — |
| l.c.l., works | 100 lbs. | 11.35 | — |
| Chromate (see Yellow, zinc). | | | |
| Cyanide kgs., 1,000-lb. lots or more, works | lb. | .523 | — |
| smaller lots, works | lb. | .543 | — |
| Dust, pigment, bbls., c.l., works, | lb. | .15¾ | — |
| l.c.l., works | lb. | .16¾ | — |
| Fluoride bbls., works | lb. | .49 | .50 |
| Hydrosulfite, dms., c.l., frt. alld. | lb. | .21½ | — |
| l.c.l., frt. alld | lb. | .22 | .37½ |
| Metal, prime western slabs, E. St. Louis | lb. | .12½ | — |
| New York | lb. | .13 | — |
| Naphthenate, liq., 8% Zn., dms., frt. alld | lb. | .24½ | — |
| 10% Zn. dms., frt alld | lb. | .30 | — |
| Oxide, pigment, American process, lead-free bgs., c.l., frt. alld. | lb. | .14 | — |
| l.c.l., same basis | lb. | .15 | — |
| leaded 35%, bgs., c.l., milled, frt. alld. | lb. | .14⅜ | — |
| l.c.l., same basis | lb. | .15⅜ | — |
| 50%, bgs., c.l., same basis | lb. | .14⅞ | — |
| l.c.l., same basis | lb. | .15⅞ | — |
| French process, coml., green seal, bgs., c.l., frt. alld. | lb. | .15¾ | — |
| l.c.l., same basis | lb. | .16¾ | — |
| red seal, bgs., c.l., same basis | lb. | .15¼ | — |
| l.c.l., same basis | lb. | .16¼ | — |
| white seal, bgs., c.l., same basis | lb. | .16¼ | — |
| l.c.l., same basis | lb. | .17¼ | — |
| USP, ctns., c.l., frt. alld. | lb. | .17¼ | — |
| l.c.l., same basis | lb. | .18¼ | — |
| Zinc oxide Pac. coast prices 1c. higher. | | | |
| Phenolsulfonate, NF, gran., dms. | lb. | .39 | — |
| powd., dms | lb. | .42 | .49 |
| Resinate, precip., 7.2-7.6% Zn, dms., frt. alld | lb. | .29 | — |
| Silicofluoride, bbls., works | lb. | .12 | .13 |
| Stearate, tech., USP, ctns., c.l. | lb. | .37 | — |
| l.c.l. | lb. | .38 | .42 |
| Sulfate cryst., 22% Zn, bgs., c.l., works, frt. alld. | 100 lbs. | 8.05 | — |
| l.c.l., same basis | 100 lbs. | 8.60 | — |
| flake, 25½%, Zn, bgs., c.l., works, | 100 lbs. | 5.85 | 7.40 |
| l.c.l., works | 100 lbs. | 6.85 | 7.90 |
| powd., monohydrate, 36% Zn, bgs., c.l., dlvd. E | 100 lbs. | 8.25 | — |
| l.c.l., dlvd. E | 100 lbs. | 9.25 | — |
| Zinc sulfate in bbls. 40c. higher. | | | |
| USP, gran. dms | lb. | 26 | — |
| Sulfide, pure, bgs., c.l., dlvd. | lb. | 2530 | — |
| Undecylenate, dms. | lb. | 2.25 | 2.50 |
| Yellow (see Yellow, zinc). | | | |
| Zinc-ammonium chloride, bgs., c.l., works | 100 lbs. | 9.65 | — |
| bbls., c.l., works | 100 lbs. | 10.25 | — |
| l.c.l., bbls., works | 100 lbs. | 10.75 | — |
| Zinc-formaldehyde sulfoxylate, basic, dms., c.l. | lb. | .25½ | — |
| l.c.l. | lb. | .26 | .41½ |
| normal, dms., l.c.l., works | lb. | .52 | — |
| Zircon (G), gran., bgs., c.l., works, | lb. | .03½ | — |
| 5 tons to c.l., works | lb. | .03¾ | — |
| 1 ton to 9,999-lb. lots, works, | lb. | .04 | — |
| smaller lots, works | lb. | .06½ | — |
| milled, bgs., c.l., works | lb. | .04⅛ | — |
| 5 tons to c.l., works | lb. | .04⅜ | — |
| 1 ton to 9,999-lb. lots, works, | lb. | .04⅝ | — |
| 500 to 1,999-lb. lots, works, | lb. | .07½ | — |
| Zircon (G) in barrels, 1c. higher. | | | |
| Zirconium acetate, 13% soln. $ZrO_2$, c.l., 30,000 lbs. minimum, works | lb. | .23 | — |
| Hydride, ctns., works | lb. | 7.60 | 8.45 |
| Nitrate, dms., ex whse | lb. | 4.50 | 7.00 |
| Oxide, 92½%-99%, white, grd., bbls., or bgs., works | lb. | 1.50 | — |
| lump, electric-fused, bgs., c.l., works | lb. | .44 | — |
| 5-ton lots, works | lb. | .44½ | — |
| 1 ton to 9,999-lb. lots, lbs., works | lb. | .45 | — |
| CP, white, grd., bbls., or bgs., works | lb. | 1.50 | — |
| lump, electric fused, bags, 500 to 1,999-lb. lots, works | lb. | .45½ | — |
| smaller lots, works, | lb. | .48 | — |
| milled, electric-fused, bgs., c.l., works | lb. | .59 | — |
| 5-ton lots, works | lb. | .59½ | — |
| 1 ton to 9,999-lb. lots, works | lb. | .60 | — |
| 500 to 1,999-lb. lots, works | lb. | .60½ | — |
| smaller lots, works, | lb. | .63 | — |
| Oxychloride, cryst., ctns., 5-ton lots, works | lb. | .35½ | — |

## 'Atoms for Peace" Reactor Will Be Sold to Switzerland

The Swiss and US governments have initialed a pact covering the sale and purchase of the research reactor that is to be a central feature of the official United States exhibit at the United Nations' international conference on peaceful uses of atomic energy at Geneva next August.

The agreement covers the sale and purchase of the research reactor, the exchange of information relating to the device of the lease of special nuclear material to be utilized in the reactor. The reactor, which is to be assembled from components shipped to Geneva from Oak Ridge, Tenn., will be in operation as part of the official US exhibit while the conference is in session August 8 to 20. At the conclusion of the parley the US government, through the Atomic Energy Commission, will sell the reactor to Switzerland for $180,000.

## Cocoa Beans Use Decrease Noted in New Gov't Report

The use of cocoa beans in the United States slumped in the first quarter of 1955 despite a drop in the world price from the extreme high levels of last year, according to a new business report, "The Cocoa Situation," issued by the food industries division of the Business and Defense Services Administration.

During the first quarter of 1955, the United States cocoa bean "grind" was estimated at 103,000,000 pounds, based on figures from processors representing over 90 percent of the industry. In the corresponding quarter of 1954, US processors ground 125,633,000 pounds. The report shows that the volume of cocoa beans ground for the manufacture of chocolate products in the United States declined 18 percent during the first quarter of this year under the comparable quarter last year.

Build-up of cocoa bean inventories in this country continued, with net imports in the first three months of 1955 exceeding use by 26,100,000 pounds. Cocoa bean stocks in the hands of processors, exclusive of New York Warehouse stocks, are estimated to have reached a level of 129,100,000 pounds by the end of March. It is estimated that world cocoa bean production during the 1954-55 crop year will amount to 1,713,000,000 pounds, with favorable prospects existing in Brazil, Mexico and the Dominican Republic. The short 1953-54 world crop which led to increased 1954 prices amounted to 1,550,000,000 pounds.

## Anti-Hog-Cholera Agency Budget Published by USDA

The budget for 1955 of the control agency established under the marketing agreement regulating the handling of anti-hog-cholera serum and hog-cholera virus, and fixing the rate of assessment to be paid by handlers, was published last week by the Department of Agriculture for the comments of interested persons.

The department estimated expenses of the control agency for this year at $31,965. On January 1 there was an unexpended balance of $2,098.65 from last year, making it necessary to raise $29,866.35 from assessments this year. Of this amount $23,773.61 will be assessed against handlers who are manufacturers, and $6,092.74 will be assessed against handlers who, as distributors, market their products principally through veterinarians or other channels.

The pro rata share of the expenses for each handler who is a manufacturer will be $12.71 for each $10,000 or fraction thereof of serum and virus sold by such handler in 1954, and the pro rata share of other handlers will be $25 for the first $10,000 or fraction thereof and $2.81 for each additional $10,000 or fraction thereof of serum and virus sold by such handler.

## Brown Starts Bleach Plant

Ground will be broken in Berlin, N. H., today for a new $3,500,000 kraft pulp bleachery plant which will enable Brown Company to add bleached kraft pulp to its list of forest products.

### Colombia Cuts Caustic Soda Duty

Colombia has cut the duty on rayon-type caustic soda from 0.15 peso per kilogram plus 15 percent ad valorem to 0.04 peso per kilogram plus 6 percent ad valorem. The tariff on caustic soda for other uses remains unchanged at 0.15 peso per kilogram plus 15 percent ad valorem.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BORON TRIFLUORIDE

HYDROFLUORIC ACID

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Here is an additional group of production-controlled, high-quality fluorides:

- Ammonium Bifluoride
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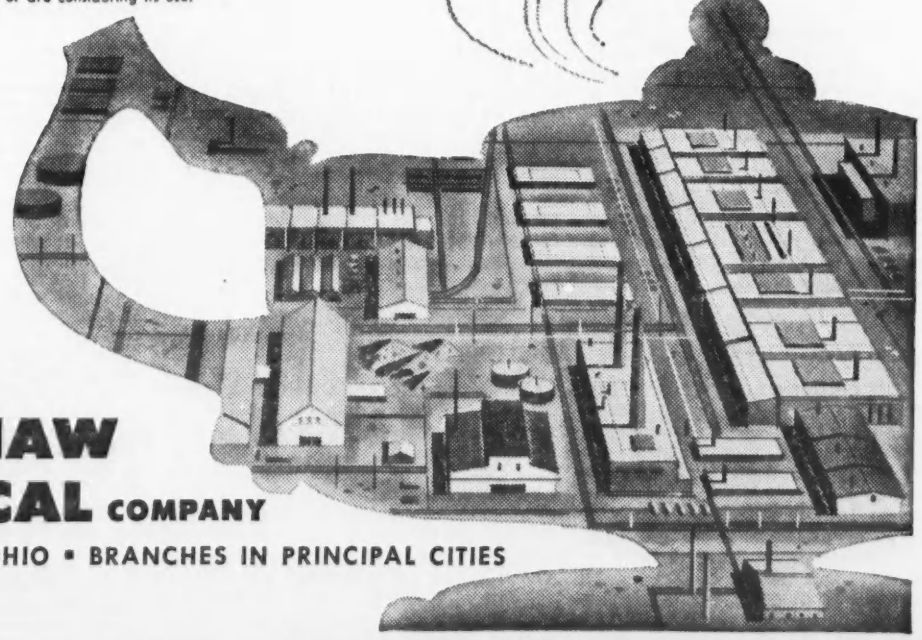
- Barium Fluoride
- Bismuth Fluoride
- Boron Trifluoride
- Boron Trifluoride Complexes
- Chromium Fluoride
- Copper Fluoborate
- Fluorboric Acid
- Fluorine Cells
- Fluorinating Agents
- Frosting Mixtures
- Hydrofluoric Acid Anhydrous
- Hydrofluoric Acid Aqueous
- Hydrofluosilicic Acid
- Lead Fluoborate
- Metallic Fluoborates
- Potassium Bifluoride
- Potassium Chromium Fluoride
- Potassium Fluoborate
- Potassium Fluoride
- Potassium Titanium Fluoride
- Silico Fluorides
- Sodium Fluoborate
- Tin Fluoborate
- Zinc Fluoborate
- Zinc Fluoride

Write for Harshaw's 40-page Book on Hydrofluoric Acid Anhydrous. It provides helpful data for you if you now use HF or are considering its use.



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## Today's World Challenge

These are big days for those who in any manner are world-minded. Politically, the interest was set up to special keenness by the visit of the Chancellor of West Germany to this country while his response to an invitation to go to Moscow for a "conference" was still pending. The keenness was increased by the fact that the foreign ministers of France, the United Kingdom, and the United States were conferring on a program of policy and procedure in preparation for the meeting of their superior executives with the Soviet headman next month. In their conferences—and in the chatter of all sorts of groups of men in the street, in clubs, and in commuter vehicles—one question has given rise to the greatest volume and variety of guessing:—Why has the Soviet been putting forth so much effort to cultivate friendly international relations, quite openly in Europe and Asia and at least less publicized in Africa and South America?

The many various guesses on what is behind that change of attitude are slowly, but steadily, becoming more realistic. It is being recognized that the objective is the same old one of cracking up the solidarity of the free Western world. Threats having been found ineffective, coaxing has been adopted—and what is of fundamental importance, the offering of markets for all sorts of trade is the biggest lollypop in the new, sweet approach.

As to what extent that lure will get any sort of attention in the political conferences, one guess is as good as another. It is scarcely to be expected that it will get what it deserves. That puts a big question up to the practical economists, the businessmen, of the free world group, especially those of the United States which is the only member of that group that can match in reality the more or less visionary markets set forth by the Soviet. There are some encouraging signs in that direction in the progress of the foreign trade policy readjustment in this country, in the concessions made by the United States to Japan and Switzerland and other nations by way of the Geneva conferences, also in the report that exports of West Germany to the United States showed an increase of more than 23 percent over the 1954 mark in the first quarter of this year. Encouraging from another angle is the report that West German imports from this country have been running around 35 percent above 1954 monthly values.

It is obvious then that businessmen should take part in the Big Four conferences—at least in a sort of coaching-from-the-sidelines role—with a readiness to show that this nation can do as much more than the Soviet in trade, as it did in aid, for the development and maintenance of an actually free Western world.

## Opportunities Closer to Home

Whatever may be their view of the importance of doing what they can to foster beneficial results of the world-bettering endeavors of the Big Three and the Big Four, United States businessmen should really know that they can do much good by properly furthering the interrelations of what to them are unquestionably the Bigger Two—North America and South America.

Something less than two weeks ago, a New York newspaper headline said:—"Latin Market Seen for U.S." That market has been visible for almost a century. It has been as plain as the nose on Cyrano's face since the present century began. But, it has not been properly recognized, in perception, promotion, or participation. The same could be said of the Canadian market up to a relatively short time ago. There is as much opportunity for highly desirable market development south of the Rio Grande as there was north of the St. Lawrence. That development is something for USA businessmen to enter upon and achieve. It will pay in much more than money if directed, as it should be, at least as much toward service as toward profit.

Of course, trading in the Latin market will long be afflicted with political interference at both ends. The reasons for that affliction are not always of political initiation. Various commercial—or at least profitmaking—pressures contribute more than a little, as in some recent matters of coffee and sugar. It is informative to learn that Colombia, which was forced to suspend imports early in May because of a shortage of foreign exchange, raised the ban about a month later to the extent of allowing general imports from countries buying Colombian coffee, to a value equal to that of the coffee exports to them.

Latin markets are big. Latin resources in United States dollars are not nearly so large. The striking of a working balance in that connection is something to which those who would enjoy the Latin markets must give the consideration that it demands. Those markets are not unknown to or unappreciated by the business interests of every other country with something to sell. And they are much better understood there.

## Don't Rush the Atom Age

With the entrance of politicians into the promotion of atom-power applications, the already confused and confusing concept conflict of physical scientists, sociologists, and moralists on possibilities and responsibilities bids fair to develop into a muddle which will outreach that of the polio vaccine in a hundred directions. It is seriously to be advised that this nation take a lesson from others of at least equal competence in all aspects of the atomic age—and go slow. There is nothing really to be gained in human welfare by way of atom power which cannot be got much more safely and cheaply by way of coal. Why any member of the federal government, executive or legislative, should be promoting the building of atom-powered ships when this country cannot profitably operate steamers is one of those things which nobody knows—even the promoters.

Politically, the public is "all het up" over the big noises made by all sorts of noisers about atom-power for peace. But, who has demonstrated the practicability of such an undertaking? Oh, yes; the Atomic Energy Commission has reported the doing of wonders by way of atomic fission. But, has it told the whole truth and nothing but the truth about the conditions under which those doings have to be carried on? The radioactive—or whatever they may be called—effects of atomic fission are not confined to the testing of bombs. The AEC belittling of the hazards of genetic mutations attributed to the fallout from atom-bomb tests does not measure up to the standards of caution set forth by scientific groups in, say, Great Britain. Of course, the operating of reactors and other processing with atomic "fuel" do not run up to the hazardousness of bomb tests; but, there is all too little reliable general knowledge of how even such processes must be, let us say, respected. Anyone who has had any practical experience in the application of X-rays knows what that can mean. Anyone who has done any observing of the manner in which the power of "molecular fission" in an internal-combustion engine is misapplied can guess pretty well what would be some of the results of equal popularizing of atomic fission among those with an equally inadequate equipment of know-how and still less care-how.

Atomic power is a wonderful thing. But, the world does not need it to any such extent as would justify total lack of consideration for the hazards of its application by those whose competence was far from adequate, under conditions still less adequate in a protective sense. Electricity is harmful enough under such circumstances; and it is more easily insulated. There is little satisfaction in being told, along the line of reported AEC reasoning, that natural electricity is worse than man-made. Man did not recognize that harmfulness in his first half-century. In terms of human understanding, it is too soon for atom power.

## *Washington Talks It Over*

**By Ralph L. Cherry**
*Chief, OPD Washington Bureau*

Secret deals between the Department of Justice and companies facing antitrust law prosecutions have been ruled out by Attorney General Brownell. There will be no under-the-counter settlement of issues and all agreements will be placed on the court records.

It is the policy of the department now to avoid court litigation of antitrust matters as far as possible. When there is evidence of an antitrust violation, the accused company is invited into conference for a discussion of the issue and an effort is made to arrive at an agreement to end the unlawful practice.

When agreement has been reached between the company and the government, this is set out in the form of a consent decree and filed with the court simultaneously with the filing of the antitrust suit. The suit, of course, never comes to trial in light of the decree and thus the unfavorable publicity that often attaches to antitrust cases is avoided.

There had been some feeling among the congressmen, however, that in view of the closed door preliminaries to filing of antitrust charges, the law was not being enforced as it should. Mr. Brownell set the policy straight on this matter, however, as follows:—"The antitrust division has no intention of settling any pending cases without the entry of a consent decree. There could be no effective enforcement of any agreement unless it is made a matter of record by entry of a consent decree."

### Picking BDSA Chemical Chiefs

The chemical industry at long last has gotten around to seeing to it that the chemical and rubber division of the Business and Defense Services Administration is headed with high-calibre men for some time to come. For lost in the hubbub over his resignation as president of the Manufacturing Chemists' Association is the recent news from William C. Foster that five major chemical companies have agreed to supply BDSA with chemical directors through 1957, each man to serve a six-month tour.

Theodore S. Hodgins of Reichhold Chemicals, Inc., Seattle, Wash., as previously announced (OPD, 6/6/55), takes over on July 1. B. F. Goodrich Chemical Company, Cleveland, Ohio, will provide a man to take over on January 1, 1956, while Diamond Alkali Company, also Cleveland, will supply a replacement on July 1 of next year. In 1957, Monsanto Chemical Company, St. Louis, Mo., and E. I. duPont de Nemours & Co., Wilmington, Del., will make men available for the post, Monsanto for the first six months and duPont for the last half.

In the past, the government has found it very difficult to get major chemical firms to shake any of their top men loose until a very few days before the post was to become vacant. In one case, in fact, the post of BDSA chemical chief was unfilled until three days before the deadline.

### Defense of TVA Fertilizer Operation

The Hoover commission's report of a few weeks ago criticizing TVA's fertilizer operations came in for some verbal licks from TVA director Harry A. Curtis a few days ago, speaking before the Kiwanis clubs of the Muscle Shoals, Ala., region. In the main, his speech was a strong defense of the agency's fertilizer program and he doubted that even the fertilizer industry was in favor of going as far as the Hoover commission recommended.

The first of the recommendations of the commission was that TVA discontinue all chemical research. A second recommendation was that the fertilizer research facilities be transferred to the Department of Agriculture. Since this would be a physical impossibility in some instances, it is presumed the recommendation is for substitution of USDA personnel for the TVA research staff in the Wilson Dam laboratories.

But it was the third recommendation that Dr. Curtis found it difficult to reconcile. It is that the Comptroller General of the United States set the prices for TVA fertilizers so as to include all direct and indirect costs, including the loss of taxes which could be obtained from private industry. Considering the announced intention of the administration to get the government out of the field of commercial business, he said this recommendation is a puzzling one.

He said that TVA has never operated its production plant or distributed fertilizers in a commercial type of operation. But now, after twenty years of effort to stay away from commercial business, the commission's recommendation is, in effect, that the TVA drop all research and development and get into commercial production and sale of fertilizers.

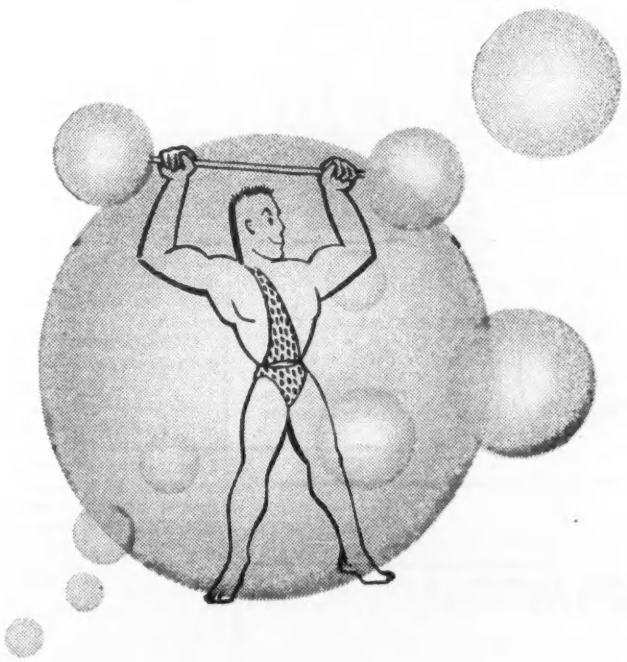
### Research by the Military

Secretary of Defense Charles E. Wilson and his deputy Chief of Staff for Development (USAF) appear to be at variance in the matter of basic research by the military departments. A week ago when the Hoover commission criticized the department for not spending enough money and effort on basic sereach, Mr. Wilson said he wanted to spend military research funds where results were likely and leave basic research to someone else.

Lt. Gen. Donald L. Putt has a different view of the subject. He says that if the increasing demand of our economy for new products and of the military for new weapons is to be met, our basic research efforts must be greatly increased. Since development of military weapons draws heavily on basic knowledge, he adds, the military must also strongly support basic research in those areas that may have possible application—solar energy, nuclear energy, materials, combustion, new chemical fuels, and medicine.

He was also concerned over the prospective research manpower shortage. Last year United States schools graduated only 19,650 engineers and technical scholars. Considering that Russia graduated two and one-half times as many, this is not only a threat to our national economy but to our national security as well. Training in higher mathematics and sciences for engineering courses in college should begin in high school; yet in the last fifty years the proportion of high school students studying algebra has dropped from 50 percent to 20 percent, and physics from 20 percent to 4 percent.

FMC CHEMICALS



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Heavy-duty detergents contain a goodly percentage of "builders" to beef up their cleaning power. Favorite "builder" for best-selling detergents: Sodium Tripolyphosphate. Favorite supplier in detergent-manufacturing plants from coast to coast: FMC's Westvaco Mineral Products Division.

Thereby hangs a tale of a seven-league-boots growth in the past seven years.

In four successive years, Westvaco built four giant elemental Phosphorus furnaces at Pocatello, Idaho . . . contracted for phosphate rock from nearby deposits . . . purchased mineral rights and leases on two of America's largest unworked phosphate shale reserves. Simultaneously, Westvaco modernized and expanded its phosphate plants at Carteret, N. J. and Newark, California . . . built a large new plant at Lawrence, Kansas. Today Westvaco is a leading producer of Sodium Phosphates for packaged detergents.

Like all FMC operating divisions, Westvaco Mineral Products Division functions autonomously under the policy guidance of FMC Chemical Divisions administrative staff. Sharing the resources, technical abilities and marketing experience of the group, it partakes in cooperative strengths that foster exceptional growth.

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# Heavy Chemicals

Production of specified chemicals in April was off an average of 6.6 percent, from March figures according to preliminary figures compiled by the Bureau of Census. Strikes during April in the alkali industry dropped production of electrolytic caustic soda 14 percent; chlorine gas output was off 13 percent, and lime-soda caustic was down 3 percent. Hydrochloric acid output was off 15 percent, showing the highest drop among the chemicals listed.

Light soda ash moved in large volume to the aluminum industry, and demand from that source continued very strong, particularly in view of the fact that aluminum production in May set an all-time record. Dense ash also sold well, as glass makers manufactured beverage containers for the summer season.

Chromic acid prices were adjusted by producers to allow freight equalization with a new producing plant in the midwest. Less carlot and less truckload prices were changed from a works basis to delivered, in the New York area. Phosphoric acid output was affected to some extent by a walkout at phosphate mines and superphosphate plants in Florida, but most manufacturers of phosphate compounds were of the opinion that stocks of raw materials on hand would tide them over. Phosphate producers relying on deposits of rock in Tennessee and other states were not affected.

Agricultural demand for copper sulfate sprang to life last week after a late start, and producers were reported operating with two days' stock on hand. Copper metal remained firm and unchanged, although the railroad and dock strikes in England drove metal higher on the London exchange. Silver continued to shade off slightly, and the mercury market remained weak and unsettled.

The American Paper and Pulp Association reported production for the week ended June 17 at 95.6 percent of theoretical capacity, as compared with the revised figure of 93.6 percent for the previous week and 93.1 percent for the corresponding week of last year.

**Acid, Chromic**—A producer of chromic acid recently brought in a new plant in the midwest, and as a result, carlot prices were placed on a freight equalized basis, rather than a simple f.o.b. works basis, as had been the case previously. The price of 27½c. per pound continued, but applied to truckloads and carlots, f.o.b. works, freight equalized with the nearest competing producing point.

Less carlot and less truckload prices were placed on a delivered basis in the New York metropolitan area, in order to make rates more uniform. Whereas past prices had been f.o.b. works for less carlots, and were listed at 28c. to 29c. per pound, depending on quantity, new prices for chromic acid in less carlots and less truckloads ranged from 28¼c. to 29¼c. per pound, delivered in the New York metropolitan area.

**Acid, Hydrochloric**—Demand was reported going strong, particularly in the midwest and northeastern sections of the country. In those sections, a good balance between supply and demand was maintained. However, in certain areas in the south, producers of byproduct acid still had their problems of oversupply.

Preliminary figures compiled by the Bureau of Census show April production of hydrochloric acid at 59,351 tons (100 percent HCl basis) as compared with 69,599 tons produced in March. The total in April represented a decrease in manufacture of fifteen percent under totals registered for March.

**Acid, Hydrofluoric**—Steel industry requirements, along with the needs of the glass industry and the government, kept production rates high, and shipments moving in good volume. Supplies were in good balance with current demand. Prices were unchanged and steady.

**Acid, Nitric**—Shipments continued to be in large volume, and in all types of containers, as rates of intake by consuming industries continued high. Steel production was a key factor, as well as heavy synthetic organic chemical requirements. Supplies were said to be on the snug side, although no shortage was present or anticipated.

**Acid, Phosphoric**—A strike which tied up phosphate mines and superphosphate output in Florida during the week was not expected to have too great an effect on the supply position of phosphoric acid unless the strike continued for a long time. Current raw material stocks at acid plants were judged adequate for immediate needs. Prices were stable.

**Acid, Sulfuric**—Requirements by the fertilizer industry for the manufacture of ammonium sulfate and superphosphate were down, partly due to the current period being slow for plant food consumption, and partly because of a strike which has tied up production of superphosphate. One source reported that one or two small sulfuric acid plants directly connected with the superphosphate industry were also shut down due to the labor dispute, but this situation was expected to have no far-reaching consequences in the supply picture.

Steel and rayon continued to operate at high output levels. Steel output for the week has been estimated at 2,330,000 tons, or 96.5 percent of present capacity, as compared with actual production of 2,286,000 tons the previous week, or 94.7 percent of capacity. Actual output one year ago was 1,725,000 tons.

Petroleum refining also took good quantities of acid, as did alcohols, inorganic pigments, and industrial explosives. Supplies of sulfuric acid were said to be ample enough to promptly supply consumers with what they needed.

Preliminary figures compiled by the Bureau of Census show a four percent decline in output of sulfuric acid for April, as compared with March. Output in April totaled 1,339,115 tons, as compared with 1,387,831 tons produced in March.

**Borax**—Prices for borax remained steady and unchanged. Demand remained strong from several consuming industries, and as a consequence some types were in short supply.

**Bromine**—Consuming demand for this halogen held up well. Stocks were available for prompt delivery at steady listings.

**Calcium Carbide**—Demand was thought to have held about unchanged. It was felt that with increased output of consuming industries, as well as construction of new facilities for manufacture of synthetic organic chemicals requiring acetylene as a raw material, the near future for carbide looked good. The Bureau of Census reports that production of calcium carbide in April declined one percent under March figures. Output in April was 71,923 tons, as compared with the March figure of 72,522 tons.

**Chlorine**—Chlorine supplies were generally tight. Some producers were reported running slightly behind on shipments. It was said that rapidly expanding production of chlorinated organics, including pesticides, solvents and other materials, was the key factor in the currently tight market position.

One source noted that while increased seasonal demand for water and sewage treatment was a definite factor in the current market, it held little relative importance today as compared to twenty-five years ago.

The Bureau of Census reports that chlorine gas output in April totaled 235,158 tons, a decrease of thirteen percent beneath the output figure of 269,319 tons reported for March.

**Copper Sulfate**—Manufacturers reported that the supply position was so close that operations were being carried on with roughly two days' inventories at producing plants. Most facilities were reported producing at capacity. It was noted that during the past two weeks, agricultural demand had experienced a sharp pickup after a slow start and a late season. Industrial demand remained steady, and at high levels.

**Potassium Carbonate**—Prices were unchanged. Business was satisfactory during the week, and producers reported good volumes moving to consumers for several applications. Supplies were plentiful for current needs.

**Soda Ash**—Dense ash sold in heavy quantity to the glass industry, as pro-

*For Late Market Developments, See Page 4*

## *Price Trends*

**Advanced**

Tin, 2¼c. per lb.
Zinc, ½c. per lb.

**Reduced**

Silver, ½c. per oz.

**Comparative Price Indexes**

(100—1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 98.33 | 98.33 | 98.33 | 98.48 |

(*For Current Prices see Page 9*)

duction of beverage bottles for the summer, combined with high output of window glass for the booming automotive industry, kept glass producers busy during the week.

The market for light ash was also active, a key factor being the record production levels of the aluminum industry. Aluminum output in May set another all-time record, and as a consequence, the aluminum industry was in heavily for light ash. Other chemical end uses also accounted for sizable withdrawals. Prices for both light and dense ash were steady and unchanged.

**Soda, Caustic**—Some of the rayon grades were not too plentiful during the week. Some types of mercury cell caustic soda in particular were said to be in close balance. Dry flake caustic was scarce in spots, due to production having been lost recently when a major producer was out on strike. The trade reported that it had taken a good bit of pressure on production since the end of the dispute trying to regain a favorable balance.

Demand held up strongly from the rayon and cellulose film industries, and paper mills were also active for caustic and chlorine as well, for beaching purposes.

The Textile Economics Bureau reports that producers of rayon and acetate yarn, staple and tow shipped 102,000,000 pounds in May, a decrease of nine percent compared to April but eleven percent more than in May, 1954. Exports accounted for about 1,500,000 pounds of total shipments last month.

The United States remains the world's largest producer of rayon and acetate, with an output of 1,085,700,000 pounds in 1954, or 24 percent of the world's total. This compares with 29 percent of the total in 1953 and a peak of 50 per cent of the total in 1946. United States capacity is rated at 28¼ percent of the world's total, and in 1956 it will increase slightly to 28½ percen.

**Sodium Silicate**—Demand was strong for a number of end uses. Increased interest was noted for use as a boxboard adhesive. Good call was reported for use as a buffering agent in synthetic detergents and soaps, as well as for use in silica gels. The most important factor in the market according to producers was the petroleum industry, as large amounts of sodium silicates are used in catalysts.

Quotations for the silicates were stable and without change. Present output and supplies were such that consumers could get what they needed with little or no delay.

**Sodium Sulfate**—Although demand was said to be rolling along about unchanged for saltcake over the past few weeks, supplies in the hands of producers continued to build up, as consuming kraft mills adjusted their needs downward, preferring to work off stocks accumulated during the recent period of scarcity.

Producers of saltcake pointed out that there had been several factors making for a buildup of stocks during the past few months. One was that increased rayon output for the first quarter had accounted for heavier production of rayon saltcake. Bichromate output was also up for the first quarter, and consequently more byproduct cake was produced by that industry. Mannheim furnaces have also been busy keeping up with increased hydrochloric acid requirements in some areas, and as a result, co-product saltcake has been made more plentiful from that direction.

There was some speculation in the trade as to whether saltcake imported from Canada would be an important factor in the next few months. It was generally believed that due to adverse weather conditions in Canada, imports of natural cake would decline.

Demand for detergent grades of sodium sulfate, including Glauber's salt, appeared to have diminished to some extent, due to the fact that sales of some of the detergents normally fall off during the summer months. Vacation shutdowns also were said to play an important part in declining sales, as consuming plants did not want to load up on inventories before shutdown periods.

## Nonferrous Metals

**Aluminum**—Primary aluminum production in May set an all-time record. Output for the month totaled 262,256,336 pounds, as compared with 252,788,467 pounds in April, and 250,276,637 pounds in May, 1954. The first quarter of 1955 shows an all-time record output of 749,423,226 pounds, according to the Aluminum Association.

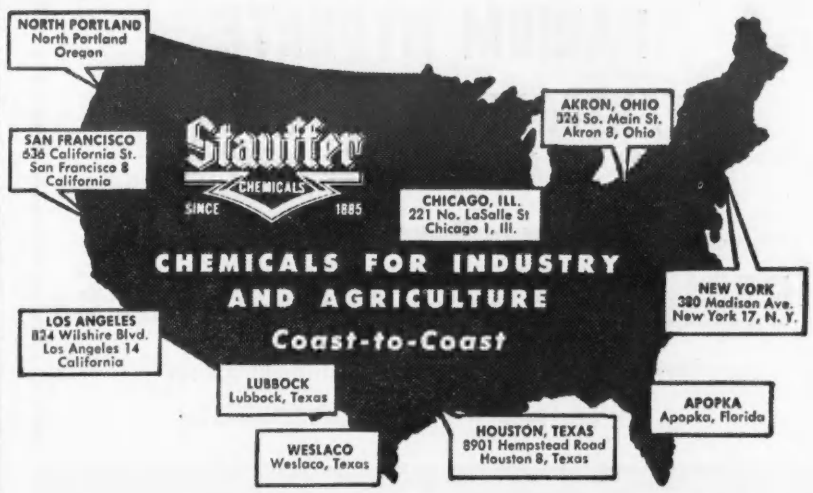
The steel industry consumed more than 34,000 tons of aluminum during 1954, according to the Iron & Steel Institute. Nearly eight percent of the metal is used as an alloying element and to remove oxygen from steel. Small amounts are used as coating and cladding material for steel.

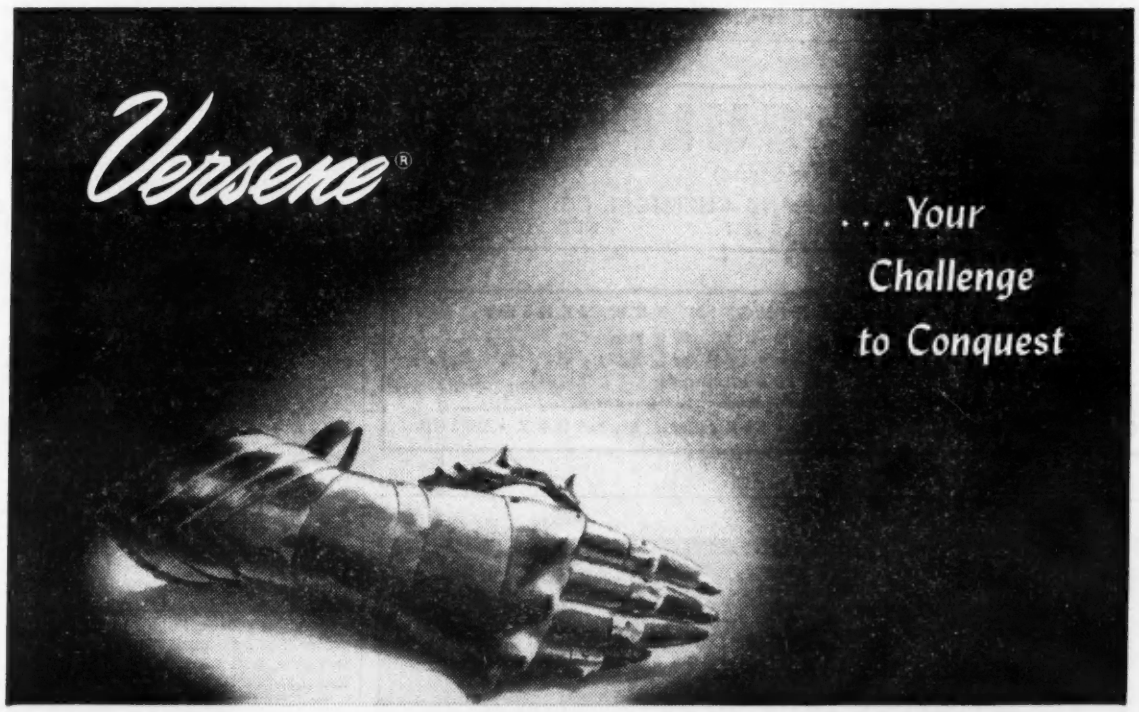
**Copper**—While the American price of 36c. per pound, delivered, held firm and unchanged, London copper went as high as 43c. on the London Metals Exchange last week, due to a number of factors including the dock and railroad strikes in England.

World refined copper output in May reached an all-time high, according to the copper institute. Some 251,791 tons were produced in May, as compared with 224,525 tons in April, and 204,287 tons in May, 1954.

World stocks of refined copper showed a substantial increase in May as a result of increased production abroad. Stocks at the end of May totaled 219,960 tons, as compared with 200,835 tons at the end of April, and 337,358 tons on hand May 31, 1954. Stocks increased by 19,125 tons over the previous month's totals.

Domestic refined copper production in May amounted to 135,042 tons, as compared with 122,129 tons in April, and 108,723 tons in May, 1954. Domestic stocks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**VERSENE-T** chelates ferric and divalent metal ions including hard water salts in *any* caustic solution. (Available as 55.5% solution)

**VERSENE-9.** This is a technical grade of the trisodium salt of EDTA. It has a pH of 9.3 in solution at 1% concentration. 1 gram chelates a minimum of 242 mgms. of $CaCO_3$. Its general chemical reaction is identical to Versene.

**VERSENE IRON CHELATE** is an agricultural Versene to correct iron deficiency and cure chlorosis in citrus and other green growth occurring in *acid* soils. It is the disodium iron chelate of EDTA absorbed into inert vermiculite for convenience in application. (Available in 50 lb. bags)

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George Mann & Co., Inc., 251 Fox Point Blvd., Providence, R. I.
Braun-Knecht-Heimann Co., San Francisco, Calif., Salt Lake City, Utah
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increased by 581 tons during May to a total of 43,340 tons, as against 42,759 tons on hand at the end of April, and 82,124 tons on hand at the end of May, 1954.

Copper consumption for use in the steel industry in 1954 amounted to 43,098 tons. About one third of the copper consumed went for coating steel.

**Lead**—The market was quiet. Pig lead continued quoted at 14.8c. per pound, East St. Louis and 15c. per pound, New York basis. Some 14,728 tons of lead were used by the steel industry in 1954. About one fourth was consumed for coating purposes.

**Magnesium**—Pigs were quoted at 28½c. to 29.7c. per pound, depending on shipping point, and ingots were listed at 29¼c. to 30½c. per pound, same basis. Both prices were unchanged. Magnesium production for May was expected to show an increase due to the return to operations of a plant which was strikebound through part of April.

**Mercury**—The market remained unsettled, with continuing buyer resistance to current prices. Metal was quoted at $288 per flask, spot.

**Nickel**—The shortage continued acute, and consumers were forced to scramble to get what they needed. Prices held firm and unchanged. The steel industry used some 36,430 tons of nickel in 1954. Of that total, all except 220 tons was alloying metal in steelmaking.

**Selenium**—Metal remained quoted at $6 to $7.25 per pound, but government requirements took up nearly all available supplies, leaving consumers with thinly spread stocks. Resellers continued to command premiums at least twice as high as list.

**Silver**—The spot price eased off again. Bullion was quoted last week at 89¼c. per troy ounce.

**Tin**—The tin market rose sharply during the week. Straits metal was quoted at 95c. per pound, spot. Consumption of tin by the steel industry in 1954 was 39,080 tons. Nearly all of it was used in coating steel for last year's record output of tin and terne plate.

**Zinc**—Prices rose ½c. per pound for prime western last week, due to close stocks and good demand. The steel industry consumed 279,788 tons of zinc during 1954. All but 407 tons of the amount went for coating or galvanizing of steel products.

## Texas Eastman to Expand 'Oxo' Facilities at Longview

James C. White, president of Texas Eastman Company, a division of Eastman Kodak Company, has announced that an expansion of the "oxo" facilities at Longview, Tex., is underway. The increased facilities will provide further capacity for the manufacture of butyl and derivatives.

Mr. White said the projected facilities will permit production of other chemicals in addition to the butyls, such as propyl aldehydes and derivatives, anyl aldehydes and derivatives, and decyl alcohols. Provision also is being made at Texas Eastman for modification of some of the auxiliary equipment to permit rapid expansion of facilities manufacturing neopentyl glycol and trimethyl pentanediol, as demand warrants. The new facilities at Longview are expected to be in operation by late fall of this year.

## Barrett Purchases Land Near Ironton, Ohio, Plant

Barrett Division of Allied Chemical & Dye Corporation, New York, has purchased an additional eleven and one-half acres of land adjoining its present Ironton, Ohio, plant, according to announcement by T. J. Kinsella, president. Mr. Kinsella stated the acquisition will provide room for expansion of the plant's manufacturing facilities.


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## Insecticide Value Reported By Agriculture Department

The value of controlling cotton insects with chemical insecticides has been demonstrated throughout sixteen years of experiments at Waco, Tex., the Department of Agriculture reports. In tests at Waco since 1939, treated cotton fields produced almost 40 percent more seed cotton than untreated fields.

Entomologists of USDA's Agricultural Research Service believe these experimental results are directly applicable to the central Texas cotton-growing region, and also to much of the country's non-irrigated Cotton Belt. Sixteen consecutive years of comparing insecticide-treated with untreated plantings on a total of nearly 6,000 acres resulted in yield averages of 1,003 pounds of seed cotton per acre for treated fields and 719 pounds for untreated fields.

Use of insecticides resulted in higher yields during every year of the tests. The lowest increase—9.9 percent—was registered in 1939; the highest was a 157 percent increase in 1946. Entomologist C. R. Parencia, in charge of the Waco Cotton Insect Laboratory, notes that prior to 1945, when inorganic insecticides such as arsenicals were relied on for insect control, the average yield increase from treatment was 33½ percent. But since 1945, and the advent of organic chemical insecticides, the average yield increase due to treatment has been nearly 53 percent.

Similar information released last year from USDA's Tallulah, La., Cotton Insect Laboratory showed that, over a 34-year perior of field experiments at that station, insecticidal control increased average yields by 25.5 percent. However, since 1939, the average increase due to insect control at Tallulah has been 50 percent. K. P. Ewing, head of cotton-insect research for the Agricultural Research Service, established the Waco laboratory in 1939 and directed its research until he was appointed to his present post in 1953. In 1949 the Waco laboratory staff received a Superior Service Award from the Secretary of Agriculture for outstanding contributions to cotton-insect control.

## Metal Mercury Advances Announced by Metalsalts

Advanced refinement technics have been developed in connection with the production of a superior metal mercury, possessing improved physical characteristics, according to a recent report by Metalsalts Corporation, Hawthorne, N. J.

The new mercury is said to present a mirror-like surface brilliance, with no observable oxidation apparent as a result of extensive test shipments between New Jersey and California. Of special interest to laboratory technicians and manufacturers of instruments and automation equipment, the new mercury is reported to be almost completely free of any meniscus.

## Porter Buys Vulcan Crucible

Vulcan Crucible Steel Company, Aliquippa, Pa., tool steel manufacturers, has been purchased by H. K. Porter Company, Pittsburgh, Pa. Vulcan Crucible becomes the twelfth Porter division. James O. Flower, president of Vulcan Crucible, will be vice-president and general manager of the new Porter unit.

## United States Revenue Returns Details Are Reported for March

Details of collections of miscellaneous internal revenue taxes for March have been issued by the Bureau of Internal Revenue. Among the collections reported by the bureau were the following:—

| | March 1955 | March 1954 |
|---|---|---|
| Coconut and other vegetable oils, processed | $ 49,000 | $ 581,000 |
| Diesel oil | 16,566 | 325 |
| Distilled spirits, domestic excise tax | 154,907,000 | 136,211,000 |
| Distilled spirits, imported excise tax | 18,907,000 | 17,147,000 |
| Gasoline | 60,170,000 | 9,828,000 |
| Lubricating oils | 3,018,000 | 20,630,000 |
| Matches | 37,000 | *—175 |
| Narcotics, including marihuana and special taxes | 65,000 | 43,000 |
| Silver bullion sales or transfers stamp tax | 27,000 | 1,000 |
| Sugar | 6,407,000 | 32,000 |
| Toilet preparations, excise tax | 2,548 | 1,957 |
| Tranportation of oil by pipeline | 286,000 | 305,000 |

* Negative amounts in monthly totals are due to revisions of amounts for earlier months.

## Lion Completes Well in Kansas

Lion Oil Company, El Dorado, Ark., has completed the Brooks and Younger No. 1 well located in Barber County, Kans. This was a wildcat well in the Brooks and Younger Unit, owned jointly by Lion and Gulf Oil Corporation, Pittsburgh, Pa., and operated by Lion.


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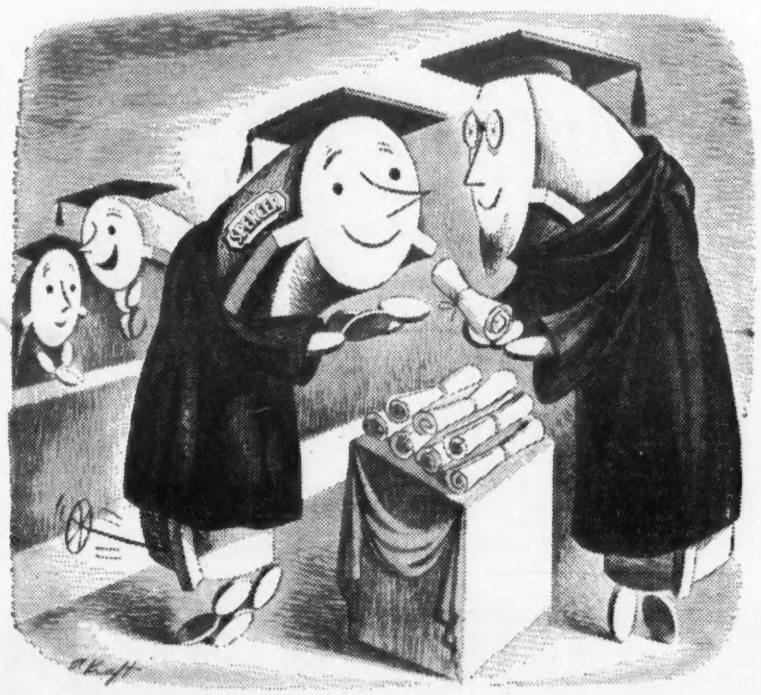

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## Synthetic Lubricant Source Study Report Is Announced

The final report on a two-year program of air force research into the actual and potential supply of materials for synthetic lubricants has been released by the Office of Technical Services of the Department of Commerce.

The study, done by Standard Oil Development Company for Wright Air Development Center, was approached in two ways:—A survey of the potential availability of raw materials from which ester-type lubricants can be made, and an evaluation of many types of esters to determine their suitability as lubricants for high-power aircraft engines.

The first part of the program included a survey of data from various literature sources on over 800 compounds, chiefly esters. Most available of the esters studied were adipic acids and oxo alcohols. Another promising source of synthetic oil appeared in polypropylene glycols.

In the second phase of the study many types of esters were evaluated for the fundamental properties which make them desirable as lubricants for aviation equipment. These include good viscosity-temperature and viscosity-volatility relationships; low melting and pour points; stability toward oxidation, hydrolysis, and heat; and good lubrication characteristics. Results of the studies are discussed and detailed analyses given in tables and charts. This report is available as PB 111565, "Synthetic Lubricants," from OTS, Department of Commerce, Washington 25, D. C. The report is dated October, 1953, and contains 168 pages. The price is $4.25.

## Stanford Research Appoints Pasadena, Calif., Lab Mgr.

Dr. Robert D. Englert has been appointed manager of the Pasadena, Calif., laboratory of Stanford Research Institute. Dr. Englert has worked with Stanford since 1949, and has conducted major research in the utilization of inedible tallow, developing a process whereby the tallow is oxidized to dibasic acids. He has followed this work by studying products of the nitric acid process as intermediates in plasticizers and lubricants, and has also developed herbicides designed to clear undesirable brush from grazing lands.

## CSMA Annual Meeting Proceedings Now Available in Transcript Form

Printed copies of the proceedings of the annual meeting of the Chemical Specialties Manufacturers Association, held in New York last December, are now available. Containing a complete transcript of all general, divisional, and special committee meetings, the 210-page, spiral-bound, record is priced at $7.50 per copy postpaid in the United States and Canada, and $8 per copy postpaid to other countries. Orders should be addressed to the secretary of the association at 50 East 41st street, New York 17.

## *Oil Chemists Group Plans*

*—Continued from page 7*

search Laboratory, New Orleans, La., will open the afternoon session. "Ultraviolet Spectroscopy," by R. T. O'Conner, also of Southern Regional Research Laboratory, will follow. Mr. O'Conner will also talk on "Infrared Spectroscopy," at this session.

A talk on "Dilatometry," by W. Q. Braun of Wilson & Co., Chicago, will open the August 3 sessions on August 3. He will be followed by R. R. Allen of Armour & Co., Chicago, speaking on "Chromatography." The morning's session will close with a lecture on "Fractional Distillation," by A. W. Weitkamp of Standard Oil Company (Indiana), Whiting, Ind.

"Fractional Solvent Crystallization," will be discussed by J. B. Brown of Ohio State University, Columbus, Ohio, at the morning session on August 4. H. J. Dutton of Northern Regional Research Laboratory, will talk on "Craig Countercurrent Extraction." Concluding the morning group of talks will be one on "Microscopy," by C. W. Hoerr of Armour & Co.

The afternoon session on August 4 will open with Lewis Malter of Beckman Instruments, Chicago, speaking on "Instrumental Analysis; Automation." H. P. Andrews of Swift & Co., Chicago, will follow with a lecture on "Statistical Methods."

The final day, August 5, will open with F. A. Kummerow of the University of Illinois speaking on "Measurement of Chain Length." "Measurement of Unsaturation," will be discussed by Mr. Allen. The morning group of talks will close with one on "Determination of Hydroxyl Groups," by Edward Handschumaker of Tenafly, N. J.

The afternoon session will open with R. W. Reimenschneider of Eastern Regional Laboratory, Philadelphia, discussing "Determination of Triglyceride Structure." Walter Trent of Colgate-Palmolive Company, Jersey City, N. J., will talk on "Process Control," and C. E. Morris, Armour & Co., will present a lecture on "Establishment of Specification and Standard."


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# Petroleum Derivatives

Producers last week were giving consideration to the possibility of an automobile industry cutback in production, now that fears of a work stoppage have been allayed. One producer's spokesman noted that the industry's production had been particularly heavy in the months just prior to the labor-management discussions. Now, with the heavy stocks they must have on hand, he said, there is some question as to whether or not the industry will continue at the fast production clip at which it had been moving.

Other than the automotive industry considerations, however, the petroleum derivative field has had a particularly quiet week. Both production and sales figures have remained unchanged. Quotations also have stood on a level with those of the past weeks.

The sales and resultant production changes that took place, with the impetus of the seasonal markets, earlier in the spring, have already reverted into steady and regular weekly figures. Stocks in nearly every field are full.

Producers of cleaners naphtha, which has realized only a portion of its usual seasonal upsurge, have noted the first signs of a slight decline in sales figures. It has been attributed by one spokesman to the heavy use of synthetic fibers by textile manufacturers. Fear of the synthetic fibers effect upon the naphtha market were voiced earlier in the season but were not realized until this week's sales let-up.

Lacquer diluents, mineral spirits and VM&P naphtha are the only solvents and diluents to have held steadily to a good seasonal market. Construction industry sales have remained good, a producer said. Sales to homeowners and other non-idustrial uses, however, have been the major factors in the markets' buoyancy

### Price Trends

**Advanced**

None

**Reduced**

None

**Comparative Price Indexes**

(100—1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 104.32 | 104.32 | 104.32 | 104.42 |

(For Current Prices see Page 9)

## Solvents and Diluents

**Benzol**—The unvarying sales figures of this product last week reflected the listless nature that predominated throughout the market. Though buying was still heavy in the synthetic field, there was no deviation, either productionwise, or in prices, from the figures of the past month. Tank and tankcar inventories, producers said, were plentiful.

**Cleaners Naphtha**—The first decline in what is usually considered a healthy seasonal market was noted this week. One producer marked it as a sign that earlier fears of the inroads of synthetic fibres, through their use by textile manufacturers, were at last being realized. However, he added, the decline is very slight and doesn't necessarily signify the beginning of a trend. On the contrary, the fact that the market has been as good as it has to date, in spite of the continuous and heavy use of synthetic fiber in summer clothing, appears to prove otherwise, it was said. Production figures remained unchanged and quotations were the same as those of last week.

**Lacquer Diluents**—Sales and production figures remained steady and good in the lacquer market last week. The continued heavy buying by home-owners and other non-industrial users, plus the regular seasonal market (paint manufacturers' sales to the construction industry) have given the producers what may turn out to be one of their best quarters in production history. A spokesman noted that the prime factor in the heavy sales has been the current trend on the part of homeowners to do their own construction and repairs. Quotations remained the same.

**Heptane**—Sales in this field remained at a continued low level. Government and large industrial buyers have continued to buy little, with producers questioning what the future months will bring. Since buyers are nearly all from the governmental or large industrial strata, one producer noted, the future lies in their hands. Quotations and productions figures remained unchanged.

**Mineral Spirits**—Material was reported moving fairly well but at a rate that failed to strain producer's capacity to supply. This would be a competitive market for a while yet, informed sources in the industry reported, because of the extensive producing capacity reached. No change was noted in price listings.

**Partial Aromatics**—Conditions were reported to be quite good throughout the partial aromatic production scene. Plenty of material was being handled by suppliers and indications of even better demand were being predicted for the near future by industry sources. Though a good portion of the partial's market is dependent upon any turn the automotive industry might make, this field has no particular fears in that direction. Quotations were the same as those of last week.

**Toluol**—A slight lag in government buying has brought about a minor setback in this market, it was reported. Despite two good months preceding this one, and the promise of good movement at the beginning of the month, sales appeared to sag some. Inventories were held to be practically at full capacity in some areas. Aviation gasoline sales were off over the past few months. No indications of change were in sight. Prices remained firm.

**Xylol**—Sufficient supplies of this material were on hand to take care of any added buying interest, it was stated by producers last week. Consumer buying was up slightly because of increased demand for material in various plastics and synthetic rubber producing areas. Quotations were unchanged.

## Lighter Fractions

**LPG's**—In spite of the fact that suppliers were busy adding new merchandising and marketing ideas to offset the summer drop in sales, the market was moving into its mid-seasonal slump. Sporadic weather offering an occasional cold snap during the earlier part of the month and the later portions of last month failed to offer any relief. Demand was not strong enough to warrant any price changes and propane and butane were steady at previous listings.

## Waxes

**Microcrystalline** — Considerable strength was noted in most of the market, with little change in sight. Buying interest in both refined and other grades was following normal trends. Production was working at full capacity to meet consumer demands. Manufacturers found ready markets for all types of materials. There were no quotation changes.

**Paraffin**—Wax makers stated that conditions were favorable, as in other wax materials. High melting point product demand continued to be strong as the food packaging industry stepped up production to meet increased buying during summer months, producers stated. Since any price changes that might have taken place would have occurred at the beginning of the month (end of the second quarter), no price changes are anticipated.

## Miscellaneous

**Crude Oil**—Crude oil and lease condensate production showed a decline of 6,750 barrels during the week ended June 11.

**Lubricating Oil**—Stocks of midwestern lubricating oils rose 3,596 barrels during April to 1,760,656 barrels at the month's end, according to figures of the Western Petroleum Refiners Association. The only decline came in inventories of paraffin oils, down 8,957 barrels to 94,539.

### Los Angeles Petroleum Market

*Los Angeles.*—Sales and production levels of petroleum derivatives remained unchanged. Demand for lacquer diluents was good; high melting point paraffin waxes remained in balance. There were no price changes.

### Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended June 4 totaled 278,236,000 barrels according to data reported to the Bureau of Mines. Compared with the total of 281,912,000 barrels for the preceding week, this represents a decrease of 3,676,000 barrels comprising a decrease of 3,848,000 barrels in stocks of 172,000 barrels in stocks of foreign crude.

For Late Market Developments, See Page 4

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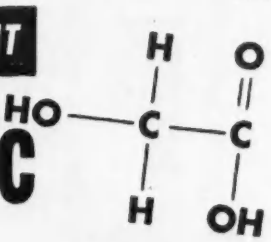

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# Industrial Organic Chemicals

The only price activity in industrial organics was by formaldehyde producers who followed the fractional increase started the previous week by one producer. All sources had not gone along before press-time, leaving a range in producer schedules for some grades.

The rise was general at ¼ cent for tankcar quantities. However, a ½ cent move was made in drum prices, while one maker advanced less than carlot drum prices 0.55 cents.

Other related products did not seem to be affected by the formaldehyde price move. Methanol producers reported that prices have remained steady and added that the formaldehyde revisions were not expected to result in other moves. No changes were reported for paraformaldehyde or formic acid. Trade sources indicated that the rise was made in an effort to adjust the price structure of formaldehyde to higher methanol levels established a few months ago.

Overall demand levels were unchanged from previous weeks. Solvents moved well, which meant continued sales for MEK, butanol, butyl acetate, acetone and ethanol. Demand from synthetic resins held up well for formaldehyde and glycerine, as well as other organics used in this direction.

The market for butadiene was in a very close balance. Activity in the synthetic rubber industry has even picked up slightly after private ownership of former government facilities took effect. The call for carbon disulfide was excellent. Rayon output has given the market a lift and producers do not foresee any real slump in buying. Refrigerants and propellants were providing a substantial call for carbon tetrachloride. Room air conditioning units picked up and are an excellent outlet for carbon tetrachloride. Ethyl ether moved very well. Demand for refined glycerine was still very good. Iso-octyl alcohol sold in excellent volume. Perchloroethylene was getting extra calls from buyers trying to beat the price rise, it was said.

**Acetone**—The market appeared to be relatively quiet. Many producers indicated that they were moving their output along. Demand held up well. About the only weakness still reflected was seen in competition for government business, it was said. Market prices were steady at 7c. per pound in tankcars.

**Alcohol**—Producers felt that the market for ethanol is generally firmer than it was a few months back. Prices were holding to current levels, with no significant pressure apparent to move in either direction.

Demand was steady and well diversified. Production capacity was adequate to take care of consumption requirements. General solvent demand was expected to hold up, as well as the call for pharmaceuticals and cosmetics.

Figures on production, withdrawals, and stocks released by the Alcohol and Tobacco Tax Division of the Internal Revenue Service, pertaining to ethyl, completely denatured, and specially denatured alcohol during April, 1955, compared with April, 1954, were as follows: —

**Production**

| | Gallons April 1955 | Gallons April 1954 |
|---|---|---|
| †Ethyl | 37,784,260 | 35,465,270 |
| *Completely denatured | 35,132 | 24,739 |
| *Specially denatured | 19,468,493 | 18,147,631 |
| **Withdrawals** | | |
| †Ethyl, tax paid | 650,356 | 644,025 |
| tax free | 36,513,171 | 34,030,032 |
| *Completely denatured | 36,858 | 23,168 |
| *Specially denatured | 20,118,988 | 18,407,316 |
| **Stocks** | | |
| †Ethyl | 49,717,259 | 44,329,310 |
| *Completely denatured | 13,186 | 15,758 |
| *Specially denatured | 4,491,042 | 7,361,281 |

*Wine gallons. †Proof gallons.

According to the Alcohol and Tobacco Tax Division, materials used in industrial alcohol plants in April, 1955, and April, 1954, were as follows:—

| | Pounds April 1955 | Pounds April 1954 |
|---|---|---|
| Corn and corn products | 1,478,290 | 6,237,003 |
| Rye and rye products | 451,600 | 3,333 |
| Malt and malt products | 145,170 | 237,000 |
| Wheat and wheat products | 1,056,035 | 2,562,094 |
| Sorghum grain and sorghum grain products | 1,780,975 | |
| Other grain | | |
| Total grain | 4,912,070 | 9,059,435 |
| Ethylene gas | 8,819,683 | 11,296,839 |
| Other materials | 690 | 21 |
| | Wine gallons 1955 | Wine gallons 1954 |
| Molasses | 6,547,625 | 6,417,391 |
| Ethyl sulfate | 20,853,588 | 18,634,010 |
| Sulfite liquors | 25,254,300 | 15,386,900 |
| Other materials | 2,471,304 | 2,156,291 |
| †Products used in redistillation | 2,454,568 | 4,290,354 |

†Proof gallons.

This market reports on industrial aliphatic organic chemicals. Reports on industrial aromatic organics may be found in the Coal Chemicals market, while reports on fine and rare organic chemicals appear in the Drugs, Fine Chemicals, Botanicals market.

## *Price Trends*

**Advanced**
None

**Reduced**
None

**Comparative Price Indexes**
(100 = 1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 130.70 | 130.70 | 130.45 | 131.93 |

*(For Current Prices see Page 9)*

**Butadiene**—Demand was right up tight, close to production levels, producers reported. Sources wished they had more material to take care of extra business that is available. Activity has been at a high level and has even seen some increases since the government turned over its synthetic rubber plants to private industry. Private operators are now busy filling storage space at these plants and are also operating at a good rate to take care of regular consumption channels.

Prices remained firm at previous established levels. No revisions in schedules were anticipated currently. Trade sources felt that continued good demand from rubber would hold sales of butadiene up quite well.

**Butyl Acetate**—Sustained demand from lacquer outlets provided a steady call for this ester. Producers moved their output out at the same prices as previous listings. Supplies were adequate to cope with consumption requirements.

**Butyl Alcohol**—Demand was strong and the market was good. Producers reported that they continued to move their output without difficulty. No price changes were noted or forseen.

**Carbon Disulfide** — Producers reported the picture of the market for this material was still excellent. Demand from the rayon industry has improved substantially in recent months and was showing no immediate signs of slackening.

Trade sources felt that they could look for a good market for the balance of the year. Demand was good for staple fiber and for cellophane with approximate force. Consumption was running close to production levels. But, producers had enough capacity to take care of the requirements.

Price schedules were firm at levels established at the beginning of April. No revisions in current listings were contemplated.

**Carbon Tetrachloride** — Producers reported that they have been doing an excellent business in this market. There has been a transition in recent years from solvent uses as the major outlet to propellents and refrigerants.

Not only has the increasing use of propellants for many new packaged items provided carbon tetrachloride with extra business, but, refrigerant uses have picked up substantially too. Room air conditioners were reported to be going extremely well. There was also a steady use in refrigerants for home freezers and refrigerators. However, the airconditioning business is rapidly accelerating with the approaching hot weather. Previous stockpiles in that outlet were also reduced, it was felt, thus, contributing to a better market picture.

**Ethyl Acetoacetate**—Producers related that demand in this market has held up well. Material was moving along at a steady pace to normal consuming outlets. Prices were firm and steady. Supplies were adequate for consumption.

**Ethyl Ether** — Trade sources reported that demand is good and the market is "fine." There was a slight amount of tightness for some makers, but, overall industry capacity seemed sufficient to take care of the demand. Prices were firm without change.

**Formaldehyde** — Other producers followed the fractional increase started for

*For Late Market Developments, See Page 4*

formaldehyde the previous week. Producers currently indicated that there were some minor differences in the latest increases because tankcar prices advanced the ¼c. previously announced. However, drum schedules were moved up ½c. per pound, except for a 0.55c. rise in l.c.l. drums by one maker. These announcements applied to 37 percent NF formaldehyde. Producers indicated that there would be corresponding changes for other grades such as 45 percent and 50 percent. Since all sources had not made the advance yet, a range in schedules was carried in OPD's price section.

Quotations from the new schedules were at 6.75c. per pound in drum carlots of 37 percent NF, inhibited material in zone 1, delivered. The same grade in l.c.l. quantities became 7.2c. to 7.25c. per pound, zone 1, f.o.b. plant. The new tankcar price for 37 percent formaldehyde is 4c. per pound, while sources still quoting former levels were at 3.75c. per pound, in zone 1. Zone 2 tankcars were at 4.3c. per pound in tankcars, without a range due to a limited number of producers in that area. The drum carlot price in zone 2 became 7.1c. per pound for 12-15 percent inhibited material. Carlot prices given for 7-8 percent in inhibited material were 6.5c. in zone 1 and 6.8c. in zone 2. Increases in spot quotations took effect at various days before and including June 15 among the several producers. The contract price in each instance was scheduled for advance on July 1.

New listings of methanol-free (uninhibited) in tankcars ranged from 3½c. to 3¾c. per pound in zone 1, and were at 4c. per pound in zone 2. Both increases represented a ¼c. advance, becoming effective last week on spot and July 1 on contracts.

**Glycerine**—Trade sources reported that there has been no indication of a let-up in demand. There will be some shutdown for vacations in consuming industries next month. However, many buyers were building up their inventory position in preparation for a return to work after vacation periods and some were ordering material for deliveries right after their shutdowns are completed.

Demand for refined glycerine was good in many diverse directions. The call from synthetic resins and the paint industry continued to hold well. Automobile production sustained this call. Material was moving well for cellophane output, where food packaging has boosted activity. There was also a good volume of glycerine for pharmaceutical use and for explosives.

**Iso-octyl Alcohol**—Demand for this material was holding up very nicely, producers stated. General business levels were being reflected here, trade sources felt. The activity in automobile production was responsible for extra requirements of plasticizer materials too.

There was enough production capacity to take care of most needs readily. Normal delays might be expected to be encountered occasionally because a temporary dislocation in distribution may result from the sustained demand. Trade sources would like to have a little more material to take care of some of these needs. But, output was generally sufficient to handle consumption levels.

**Isopropyl Acetate**—There was no significant change in this market. Suppliers related that they were moving all of the ester that they could expect to sell. Sales were steady at regular prices. Stocks were adequate to take care of consumer needs.

**Methanol**—Trade sources related that there has been no reaction, pricewise, in this market to the announced advances for formaldehyde. In part, the formaldehyde increase was said to be an effort to balance the price structure following the last methanol advance.

Meanwhile, demand for this industrial outlet of methanol and from antifreeze uses provided more call than present production rates were capable of handling immediately. The market has tightened up in the past few weeks as antifreeze canning operations worked into the new season. Some sources have reported the peak buying for this outlet was already

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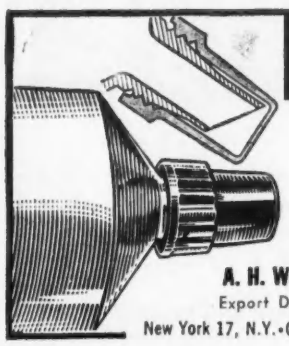

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over. But, the demand continued. And, no let-up was seen.

**Methyl Bromide** — A grain-storage-building fumigation program directed against the khapra beetle in several far western states is under way, according to a report from the Department of Agriculture. Officials believe its the largest program of its type ever undertaken.

Entire buildings—not just their contents—are sealed over, and fumigated with methyl bromide. A dosage equal to two-and-one-half times the normal treatment and 12 times the exposure duration is used. The gas, contained by sealed tarpaulins, is permitted to reach every crevice in the grain warehouse, it was said. More than 1,000,000 cubic feet of storage were treated in this manner which is felt to be the only practical and effective method for eliminating the hard-to-kill khapra beetle in infested warehouses.

Cooperating states and operators of the warehouses concerned, with assistance from USDA, unify the program on all levels, it was said. Federal and state quarantines prohibit shipment of grain, grain products, seed-bags, or other exposed materials from infested locations until they are thoroughly treated or found free of infestation. Under quarantine against the beetle, as of April 30, were 116 locations in California, 52 in Arizona, and 4 in New Mexico. The known infested locations in New Mexico were expected to be cleaned up in a few weeks. A second survey of farm storage in suspected areas is under way. Surveys have been made in parts of Texas and Louisiana, and are now in progress in Colorado, and will be extended to other states.

**Methyl Ethyl Ketone**—An excellent level of business was still being experienced by producers of MEK. Overall solvent call has been well sustained, from several different directions. Most trade sources see no appreciable letdown in the immediate weeks ahead. There was some feeling that vacation periods will eventually result in a little reduction, but, demand is generally expected to carry through.

The price structure was firm and production was ample enough for all anticipated requirements. Sustained demand from automobile finishes and furniture lacquer needs bolstered the market to a large extent.

**Perchloroethylene**—This market was enjoying an exceptionally good pace currently. Trade sources felt that much of the present spurt was due to contract price increases due to take effect July 1. In addition to some extra buying to beat the price rise, there was added call from dry cleaning outlets because of the seasonal pickup. Hotter weather normally improves activity in this direction.

## American Cyanamid Section Has New Research Groups

Two new research groups have been established in the intermediates and chemicals section of the Bound Brook, N. J., research laboratories of American Cyanamid Company.

A new intermediates group, under Dr. J. H. Thelin, will be responsible for research in the general field of chemical intermediates of the aromatic type. It will also be responsible for operation of the preparation laboratory at Bound Brook, and for the coordination of work between that laboratory and the company's new product development department. A newly-formed special chemicals group, under Dr. J. F. Hosler, will be responsible for research in certain specific fields not at present covered by other product groups at the Bound Brook laboratories.

## Monsanto Promotes Two In Organic Chemical Unit

The promotion of Dr. J. R. Durland and R. S. Wobus to the newly-created positions of technical production managers of the organic chemicals division of Monsanto Chemical Company, St. Louis, Mo., was announced last week. At the same time, it was announced that Howard L. Minckler had been appointed plant manager for the John F. Queeny plant, St. Louis, replacing Dr. Durland and that Joe Cresce, was appointed plant manager for the William G. Krummrich plant, Monsanto, Ill., replacing Mr. Wobus.

### Chemical Ass'n Tells Golf Dates

The Chemical and Allied Industries Association of Michigan has announced the following golf schedule for the summer:—June 28, Grosse Ile Country Club; July 26, Plum Hollow Country Club; August 23, Pine Lake Country Club, and September 27, Meadowbrook Country Club. The association's second annual ladies' day outing will be held at the Pine Lake Country Club of August 23.

## Arizona Chemical Places Largest Still on Stream

Arizona Chemical Company, New York, has announced that it has put on stream at Panama City, Fla., the largest tall oil fractionating still in the world. The still is an addition to the company's present facilities in Panama City. The plant enlargement increases Arizona's production capacity for fractionated tall oil products to two and one-half times its former capacity.

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# Agricultural Chemicals

A strike in the Florida phosphate area brought the mining and manufacture of phosphate rock, normal and triple superphosphate, and other related materials to a standstill during the week. No one was willing to predict the length or outcome of the dispute, but the trade agreed that it was fortunate that the peak season was over.

Eastern Canadian ammonium nitrate was reduced for the 1955-56 season. Anhydrous ammonia sales were spotty, but in moderately good volume. While synthetic anhydrous ammonia output in April was virtually unchanged percentagewise from March, ammonium nitrate output decreased by four percent, and cokeoven ammonium sulfate production was off by 1.3 percent.

The animal proteins were generally soft, with the exception of dried blood and tankage at Chicago. Reductions were posted for bonemeal, fishmeal, fishscrap, and hoofmeal. Higher-priced vegetable meals firmed the market for blood and tankage, as soybean meal recovered slowly after having reached its lowest levels in several years.

The pesticide market was still spotty on the formulator's level. The next week or ten days was expected to bring a fine cotton poison demand, but current interest in BHC was not strong enough to firm up shaky prices at the farmer's level in some sections of the south. DDT prices were fairly firm as demand showed further improvement. Sodium chlorate sales for use as a herbicide were said to be excellent.

### *Price Trends*

**Advanced**

None

**Reduced**

Bonemeal, $2.50 per ton.
Fishmeal, $3 per ton.
Fishscrap, $8 per ton.
Hoofmeal, 25c. per unit-ton.

**Comparative Price Indexes**

(100 = 1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 110.73 | 110.76 | 110.77 | 111.39 |

(For Current Prices see Page 9)

## Animal and Plant Foods

**Ammonia, Anhydrous**—Prices for fertilizer grade anhydrous ammonia remained unchanged at $85 to $88 per ton, tankcars, f.o.b. works, freight equalized. While demand was reported slower than during the peak season, it was noted that interest was still holding up well for direct application materials due to weather-delayed plantings in some regions.

Preliminary figures released by the Bureau of Census show synthetic anhydrous ammonia output for April at 285,760 tons, virtually unchanged percentage-wise from the 285,239 tons produced in March.

**Ammonium Nitrate** — A producer lowered prices of Canadian nitrate effective July 1. For the 1955-56 season, eastern nitrate is slated for a quotation of $70 per ton (33½ percent N.) bags, carlots, shipping point, freight equalized to $8 per ton.

**Ammonium Sulfate** — Recently posted schedules for cokeoven sulfate were held unchanged last week, with producers offering a three-dollar per ton concession for early shipment off the base price of $42 per ton.

Stocks around producing ovens were said to be fairly lengthy in some areas due to a number of factors:—Demand was either slow or failed to materialize due to cold weather; steel output was high, accounting for heavier sulfate production, and farmers bought hand-to-mouth rather than com...it themselves heavily ahead of time. West coast business was reported still good, with supplies fairly tight.

The Bureau of Mines reports ammonium sulfate production in April at 164,133,847 pounds, a decrease of 1.3 percent under the March output total of 166,258,291 pounds. Production in April, 1954, amounted to 130,921,736 pounds.

Sales of ammonium sulfate in April declined 3.6 percent under March levels. Output in April was 229,530,753 pounds, as against 238,052,706 pounds in March, and 213,450,546 pounds in April, 1954.

End-of-month stocks of ammonium sulfate in April were off 28.7 percent from March levels. Stocks in the hands of producers April 30 totaled 164,927,954 pounds, as against 231,432,275 pounds on hand at the end of March, and 63,078,543 pounds on hand at the end of April, 1954.

**Animal Protein**—Demand for bonemeal declined following the peak season, and as a result, the price dropped to $67.50 per ton. Fishing was reported picking up in the Atlantic and Gulf, and was judged to be running about as well as last year at this time. As catches increased, fishmeal became more available and was lowered to $133 per ton. Scrap was off sharply from the previous week's level, declining to $128 per ton, nominal.

Higher-priced vegetable meals in Chicago brought more interest into the market for dried blood, and prices there were firm. The same position applied to tankage. While soybean meal was down to its lowest levels in several years two weeks ago, the market showed signs of snapping back last week, and as a consequence, interest shifted to lower-priced blood and tankage. The hoofmeal market was off to $6.25 per unit due to the passing of the fertilizer season.

**Nitrogen Solutions** — Sellers generally offered material on a per-ton-of-product basis for the 1955-56 season, after some producers had listed various solutions on a per-ton-of-N basis.

Thirty-seven percent nitrogen solution was listed last week at $46.50 per ton of product, tankcars, freight equalized, and 41 percent material was offered at $51.14 per ton of product, same basis. An upward adjustment of $1 per ton of product was slated for the January 1-June 30, 1956, shipment period.

**Phosphate Rock** — An industry-wide strike brought shipments to a standstill last week. It was reported that all mining operations had ceased (or were about to cease in a few instances) by midweek. The current position of management in the negotiations was considered favorable due to the fact that production and sales were usually lowest at this time of year.

**Potash**—Application on some crops continued, although it was generally conceded that the peak demand season was over. Prices set earlier this month for the 1955-56 season held without change. Stocks were ample.

**Superphosphate**—Production was halted by a widespread strike, both at phosphate rock mines and at adjoining sulfuric acid and superphosphate plants. The same situation applied to manufacture of triple superphosphate. Current stocks of normal super were plentiful. Although supplies of triple were not as plentiful as normal stocks, no imminent shortages were expected.

### Los Angeles Market

*Los Angeles*—Prices unchanged. Inorganics demand was steady. Organics continued weak with the exception of fishmeal, which experienced good demand.

## Pesticides

The Department of Agriculture reports that the European corn borer as of June 4 showed 100 percent pupation and 40 percent emergence of moths in northwest Iowa. Moth flight was very heavy in the central section with 55 egg masses per 100 plants on 20-inch corn. In Minnesota, pupation and moth emergence advanced sharply in south-central and southwest districts with pupation almost complete.

Thrips were reported increasing in Arizona and Texas, and in the latter state injurious infestations were reported on cotton in untreated fields in two counties. Most destruction was reported in east, central, northeast and north-central areas. Light to heavy damage was reported in Mississippi, with damage still occurring in fields treated five times.

**BHC**—The price structure had its unstable aspects last week, as formulators reported that current business was spotty, although volume had been fairly good over the past few weeks. As a result of present business conditions, some sellers reportedly cut prices in order to stimulate interest on the consumer level. It was pointed out, however, that current hand-to-mouth ideas were such that farmers bought material only as needed, regardless of price. Trade sources felt that the real peak demand on the cotton poison level would begin in the next week or ten days.

**DDT**—Business was said to have picked up over the past few weeks at the formulation level, and prospects were for a fairly good season. It was reported that price schedules had been undercut severely some weeks ago in certain areas of the south, as sellers became uneasy at low sales volumes. However, that situation appeared to have righted itself to a great extent last week.

*For Late Market Developments, See Page 4*

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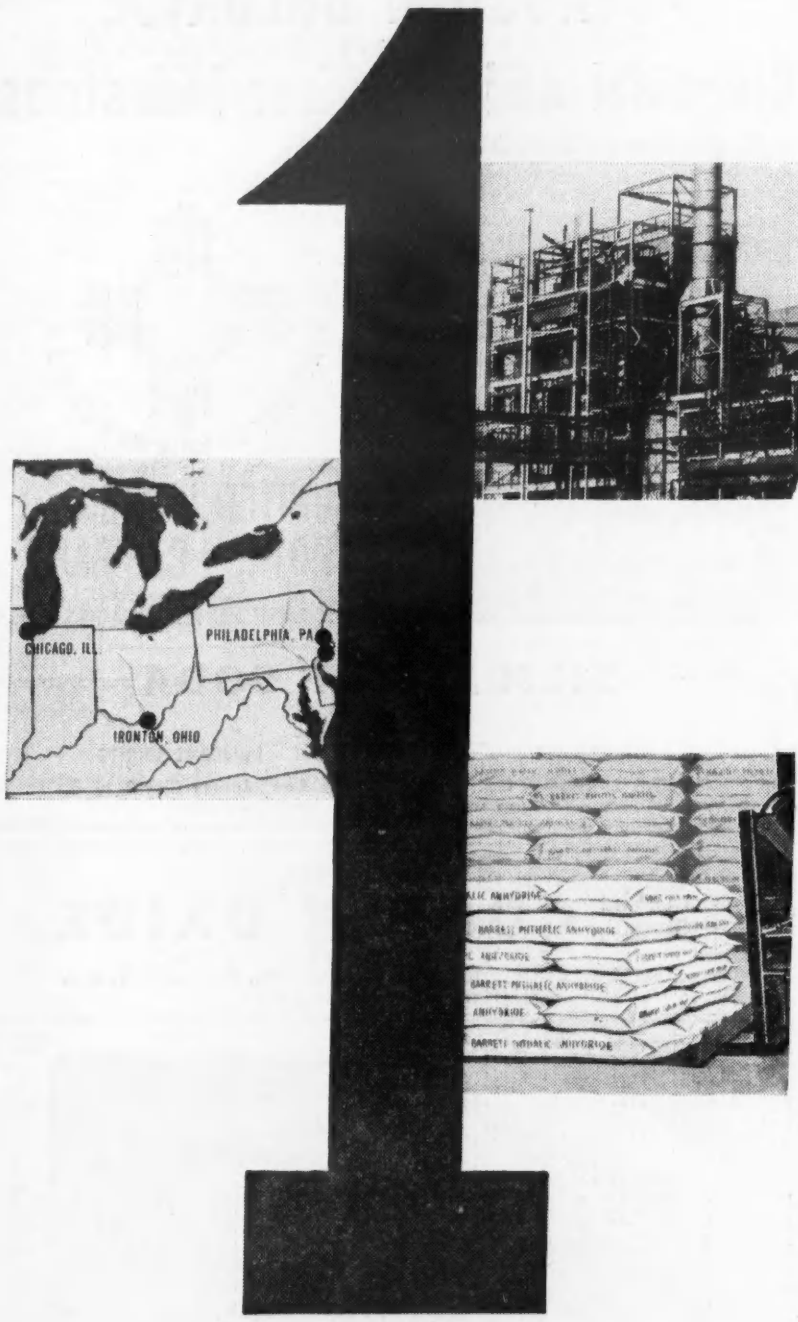






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# Coal Chemicals

Dodecylbenzene prices were reduced ½ cent per pound, according to an announcement last week. Producers stated that demand was still good, however, and production was meeting both old and new buying interest with ample supplies. Tar acid material buying was firm in most quarters. Cresols remained in strong demand, with wire enamels manufacturers inquiring for more and more material as production and laying of television cables advanced throughout the country. Cresylic acid was still in tight position in most grades. The absence of enough distillation time to handle the crude material available was mentioned as a factor in the shortage of various grades of cresylic acid.

Consumers continued to make demands greater than the amount produced on the naphthalene scene. Most of the material was being used by phthalic anhydride producers for alkyd resins used in the automobile industry. Strong demand for adhesives and molded plastics held phenol demand in firm condition. General buying interest in various grades was described as good. Pyridine was said to be slow, as some markets lost during the Korean war were not returning to old formulas requiring pyridine.

Sales to styrene manufacturers held benzol market strength at good levels last week. With labor problems just about ironed out in the automobile industry and no cutbacks of production immediately in view, the good supply and demand situation should remain for some time to come. Toluol and xylol were available in good volume. Xylol demand from insecticide and alkyd resin producers helped to maintain even demand. Styrene monomer had a excellent sales month in May, and June, normally a slow sales month, is expected to nearly equal May market figures. High production of plastics was cited as an important factor in the good showing of this material.

Steel production during the week ending June 19 was scheduled to be at 96.5 percent of theoretical capacity, or an index rating of 145.0, accordig to the American Iron and Steel Institute. This was equivalent of 2,330,000 tons of ingots and castings, compared with actual output of 2,286,000 tons the previous week, 2,338,000 tons one month ago and 1,725,000 tons one year ago.

## Basic Products

**Benzol**—Sales to styrene manufacturers continued to hold market strength at a good level over the past week. With labor conditions settled in the automobile industry, benzol suppliers could see no lag in auto production in the near future, thus insuring steady demand for synthetic rubber material for tires, molding, and many other smaller uses in automobiles.

As new developments in the manufacture of plastics were announced practically weekly, the supply of benzol being sold was notably higher, sources indicated. Steady demand was also being felt from synthetic phenol producers, dyestuffs, insecticides, and organic chemicals. The steel production rates were still very high, giving benzol producers plenty of material to meet demand from most quarters. There were no price changes.

**Cresols**—Strong demand was still in evidence over most of the market last week. Consumers were said to be buying large amounts of material for cresylic resin production. Wire enamels manufacturers were reported buying plenty of material as more and more television cables were being laid throughout the country. The tight market outlook is expected to continue for some time to come, sources indicated.

Prices were steady at recently increased levels. Consumption continued to maintain a tight balance with production. Imports of m-p-cresols for February totaled 2,000 pounds, according to the Business and Defense Services Administration. For the January-February period 3,000 pounds were imported as compared with 43,000 pounds for the same period one year ago.

**Cresylic Acid**—The tightness reported in this market over the past few weeks was unchanged. Sources indicated that sales were relatively good. Production was approaching peak capacity in most quarters. One source reported that inventories were not exceeding ten days commitments, and it was difficult at times to meet old orders along with new buying.

Buying for use in disinfectants, floatation outlets and aircraft engine cleaners provided good call for cresylic acid. Some grades were considered tighter than others, but on the whole all were moving at a good pace. A factor in the short situation was the absence of enough distillation time to handle the overall crude available to run. Prices were steady at new levels.

Imported ADF acid continued to enjoy its share of the market activity. Sources reported that enough material was coming into the country to handle old orders, but new buying may meet with some shortages in the near future. The tight domestic market is reportedly responsible for the comparative tightness on the foreign scene. No price changes were being contemplated for imported ADF, it was reported.

**Naphthalene**—Crude material was available to maintain production rates, but consumers' demand was such to reduce any possible surplus to a negligible status. Production of phthalic anhydride continued to place plenty of demand on the material. A steady picture in the automobile industry has served to maintain firm demand on phthalic for various uses in automobiles. No prices were changed last week.

Some imported naphthalene was still coming in on old contracts, but material for spot sale was no more available than it was in previous weeks. No substantial offerings were reported at currently desired prices. Consumers were resisting 7c. offers and primary sources attempted to hold out for at least that much. No immediate change in the picture was expected by importers.

**Phenol**—All producers were reported to have gone along with the recent price increases by the middle of last week. Strong demand from adhesives and molded plastics used in automobile manufacture held demand in a firm condition. General buying interest from all users was good, suppliers related. Natural technical grades of phenol have been moving in good volume. Synthetic material was currently selling at a steady pace. Ample production capacity remained to meet the stepped up demand and anticipated consumer requirements in the near future.

**Pyridine**—Material was still available in good quantities, and consumers indicated a lack of buying interest. The market could be described as soft in most areas, industry sources noted. The drive to recover markets lost during the Korean war shortage was moving slowly. Producers were of the opinion that new uses would have to be found to relieve the present surplus in production capacity. The prices were unaltered last week.

**Toluol**—Although production increases resulting from record steel operating rates made plenty of toluol available, demand was at a high enough rate to make the market steady, if not firm. Military buying was said to be a little better in the past few weeks. Prices were generally stable, however, and trade sources looked for no particular change in the market. Price listings were firm.

**Xylol**—Consumer requirements and demand were considered fairly well balanced. Strong demand from alkyd resins provided good activity for xylol. Sup-

### *Price Trends*

**Advanced**

None

**Reduced**

Dodecylbenzene, ½c. per lb.

**Comparative Price Indexes**

(100 =1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 114.65 | 114.66 | 114.68 | 114.56 |

(*For Current Prices see Page 9*)

### *Coal Chemicals*

Estimated output of coal chemicals recovered from cokeoven operations during the week ending June 19, was as follows:—

| | | |
|---|---|---|
| Ammonia liquid, $NH_3$ | lbs. | 1,088,773 |
| Ammonium sulfate | lbs. | 39,351,367 |
| Benzol | gals. | 3,764,044 |
| Coaltar | gals. | 17,264,829 |
| Creosote oil | gals. | 964,342 |
| Naphthalene, crude | lbs. | 2,659,717 |
| Pyridine, refined | lbs. | 27,997 |
| Toluol | gals. | 740,367 |
| Xylol | gals. | 197,335 |

*For Late Market Developments, See Page 4*

plies were adequate to take care of present buying. The high coking levels have made xylol producers keep marketing and production at very high rates. The 3-degree and 5-degree grades have been moving right along to pharmaceutical and dyestuff outlets. No price changes were listed.

## Intermediates

**6-tert-Butyl-m-cresol** — Contract prices are scheduled to increase 3c. per pound on July 1, according to an industry source. As of that date the new tankcar listing will be 51c. per pound. Drum carlots will be 52c. per pound, and less carlots become 53c. per pound. The recent increase of m-p-cresol fractions was said to have influenced the latest price increase announcement.

**Di-tert-butyl-p-cresol**—This product was not affected by recent price changes because p-cresol isomers were not advanced along with other cresols, according to producers. Demand was reported to be fairly stable, and production maintained a good pace. Developments in usage as an anti-oxidant and gasoline additive have maintained buying interest.

**Dodecylbenzene**—Prices were reduced ½c., it was announced last week. The new tankcar listing is 12c. per pound, freight equalized. Drum carlots are now quoted at 14c. per pound, same basis, and less carlots at 15c. per pound. Producers stated that demand was still good, and production was meeting all old and new buying interest with ample supplies.

**Maleic Anhydride**—Consumption was diversified enough to keep the market in good condition, suppliers noted last week. Sales to manufacturers of polyesters was on the upswing, while production held to a steady rate. Prices were unchanged.

**Phthalic Anhydride**—The market situation was still being described as tight in most quarters. Buying interest from automobile manufacturers was cited as a large factor in present market conditions. Phthalic anhydride exports for February totaled 2,263,000 pounds, according to the Business and Defense Services Administration. For the January-February period, 3,523,000 pounds were exported, as compared with 34,000 pounds for the same period in 1954. Imports in February were 24,000 pounds.

**Quinoline**—Marketing conditions in this material were considered stable last week. The sales picture was said to be improving slightly, as other tar bases remained in similar condition. Production figures were ample to meet present demand, and any new interest. Prices were firm.

**Styrene Monomer**—The synthetic rubber and plastics industries maintained an active interest in this material. Producers noted that sales for the month of May approached record figures and June, normally a slow sales and production period, is expected to nearly equal May market figures. Suppliers also cited the increased buying for polymers and coatings as important in the bright picture seen in most quarters. Production was keeping pace with demand, although excess material of any great volume was negligible. No price alterations were noted in the market.


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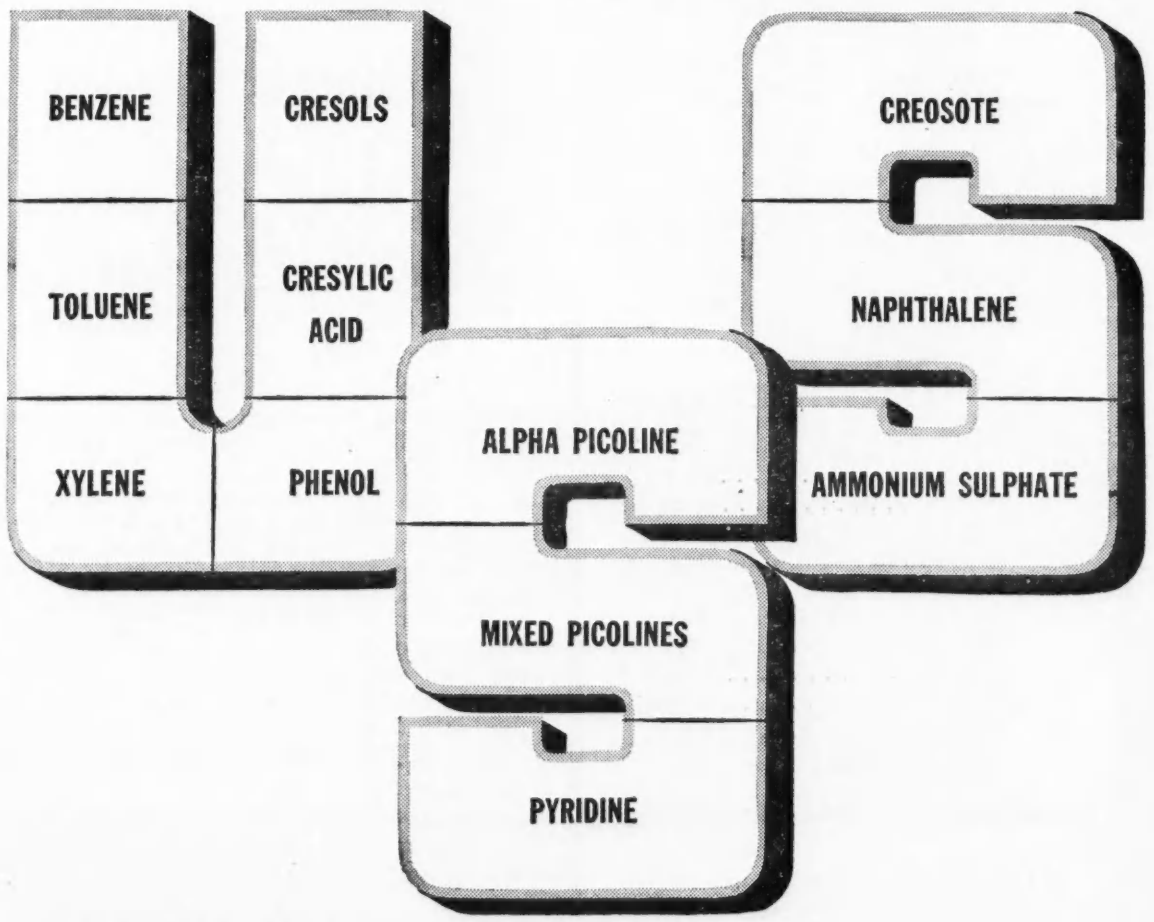


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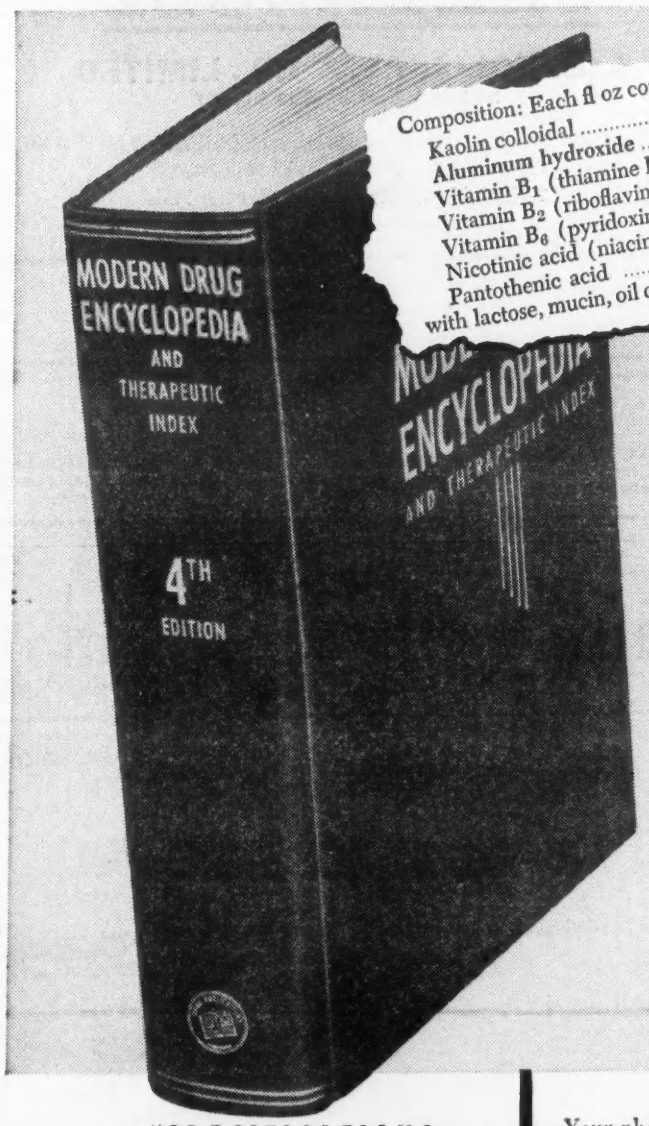


Composition: Each fl oz contains:
Kaolin colloidal ..... 6.45 Gm (gr 96)
Aluminum hydroxide ..... 0.778 Gm (gr 12)
Vitamin $B_1$ (thiamine hydrochloride) ..... 0.3 mg (100 U.S.P. units)
Vitamin $B_2$ (riboflavin) ..... 0.02 mg
Vitamin $B_6$ (pyridoxine) ..... 0.3 mg
Nicotinic acid (niacin) ..... 4.0 mg
Pantothenic acid ..... 0.55 mg
with lactose, mucin, oil of peppermint.

Description: A colloidal cream of 6.5% aluminum hydroxide, with magnesium trisilicate 0.486 Gm (gr 7½) in each 4 cc teaspoonful; flavored with peppermint.

Description: A palatable, mint-flavored colloidal suspension of aluminum hydroxide, free from sugar or alkalies.

Composition: Each teaspoonful of liquid contains (approximately) magnesium trisilicate 0.5 Gm (gr 1½); aluminum hydroxide 0.449 Gm (gr 6.9). (or 6.825 Gm (gr 105) aluminum hydroxide gel).

Composition: Each fl oz contains magnesium trisilicate 3.89 Gm (gr 60) and aluminum hydroxide 1.94 Gm (gr 30).

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| *Test* | *Baker* |
|---|---|
| Assay (as $Al_2O_3$) | 10.0–13.0% |
| Description | To Pass Test |
| Identification | To Pass Test |
| Reaction | To Pass Test |
| Acid-Consuming Capacity (cc N/10 HCl/gm 10% $Al_2O_3$) | 53.0 Min. |
| Chloride (Cl) | 0.28% |
| Sulfate ($SO_4$) | 0.05% |
| Arsenic (as $As_2O_3$) | 0.00008% |
| Heavy Metals (as Pb) | 0.0005% |

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. . . each drum of Baker concentrated Wet Gel has the exact assay shown on the label.

***Superior suspension properties***
. . . when the concentrated Aluminum Hydroxide Wet Gel is diluted, little or no separation upon standing is observed.

***Practical, protective packaging***
. . . Baker concentrated Wet Gel is packaged in non-returnable steel drums with phenolic baked lining, plus polyethylene liner.

# Drugs, Fine Chemicals, Botanicals

Further reductions in the silver bullion market last week were reflected in lower silver salts quotations. The reduction was the latest in a series of price changes in recent weeks. Silver nitrate was off 3/8 cent per ounce while the cyanide was reduced 1/2 cent per ounce. Also reduced last week were phenobarbital, USP, and its sodium salt, which were down 50 cents. Zinc oxide, USP, was recently advanced 1/2 cent, following price raises in the technical grades. A continued decline in mercury metal prices has not been reflected, as yet, by any lowering in mercury salt prices. Overall demand for mercurials, was seasonally better than it was earlier in the year as a result of a stepup in demand from manufacturers of agricultural chemicals.

In general, demand for most drug items was seasonally slow. Drug manufacturers were not expected to begin to anticipate their Fall requirements until later in the Summer. The supply situation is one of adequacy in virtually every item, it was noted.

Feed grade methionine was reported to be in steady demand. As far as was known, the bulk of this grade used is consumed in the broiler chicken industry, where it is used in the supplementation of feed rations. As a result of experimentation during the past year, a method has been worked out which makes it possible to calculate proper amounts of methionine to be used in feeds of various caloric levels, for the greatest efficiency and weight gain in broiler chickens.

Sodium benzoate and citric acid were reported to be moving at a good seasonal rate of consumption. The manufacturers of soft drinks account for a large part of the citric consumed at this time of the year while the needs of the canning industry were expected to take a substantial amount of sodium benzoate.

**Acetylsalicylic Acid**—Demand for aspirin was reported at routine levels. Supplies were adequate to cover consumer needs while prices were steady. No changes were anticipated in the current situation in the immediate future although manufacturers were expected to start building their cool weather inventories during the summer.

**Camphor**—Inquiry for synthetic camphor was reported to be running at steady levels. Supplies were ample to cover current needs and expected to continue. Prices were steady and unchanged. Natural camphor continued scarce and high priced as a result of the situation in Formosa. News of drought conditions there have not been encouraging.

**Chlorophyll**—Demand for chlorophyll continued largely unchanged. Current uses are limited principally to chewing gums, so-called "breath sweeteners" and tooth paste, to some degree. Supplies were ample for current needs and expected to continue in the immediate future.

**Creosotes**—Inquiry for the various pharmaceutical creosotes, beechwood, carbonate and hardwood, was seasonally slow. The major end use for these compounds is in cough medicines and the like. Consumption of this type drug, is, of course, virtually non-existent during the warm weather months and creosote producers looked to the latter part of the summer before drug manufacturers begin to fully anticipate their estimated requirements. Prices on the creosotes were unchanged since last reported.

**Diethylstilbestrol**—Demand for diethylstilbestrol was reported to be routine for medicinal uses. However, the prospects for a substantial increase in diethylstilbestrol consumption were good based on the latest information heard on its use as a cattle feed supplement. It was understood that the Food and Drug Administration was currently passing on a feed supplement mixture of diethylstilbestrol and terramycin which reportedly is effective in speeding up weight gain of cattle on smaller rations than customarily used. Consumption of diethylstilbestrol was expected to be stepped up appreciably when and if this new use is approved, which seems quite likely in view of experimental results achieved.

**Glycerophosphates**—Demand for this group of drug compounds was quite limited, according to trade sources. A heavy influx of glycerophosphate offerings from abroad has cut into the domestic market appreciably. This fact plus the decline in overall consumption of glycerophosphates has resulted in a cessation of production by at least one domestic producer. Despite curtailed production, stocks on hand were ample to cover current consumer needs and expected to continue in the immediate future. Prices were unchanged and in view of the situation, none were anticipated.

**Mercurials**—Despite the steady decline in mercury metal prices in recent weeks, the derivatives have not undergone any price reductions. That the current high state of mercurials prices have been influential in cutting consumption in recent years has been generally recognized but the heights to which metal prices soared made it mandatory that mercurials manufacturers raise their prices to offset the great increase in raw material costs. Although mercury prices have declined appreciably, there was some uncertainty as to whether the market would not reverse the trend and move upwards again. This possibility, plus the fact that current stocks of mercurials had been manufactured when mercury prices were at a high point, appeared to be adequate justification for any failure on the part of mercurials manufacturers to reflect the decline in mercury metal prices in their quotations, to date.

Overall demand for mercurials, at present, was somewhat better than earlier in the year since there has been an increased call for these compounds both from manufacturers of agricultural chemicals and paint manufacturers. It was reported that there has been a seasonal increase in the use of mercury pigments in marine paints.

**Methionine**—Demand for this important amino acid was reported to be moving at good levels. A substantial quantity of this acid goes into the supplementation of broiler feed rations, according to trade sources. Researchers during the past year, have discovered and developed this methionine-energy concept which relates the methionine requirement of the chick, expressed as per cent of the diet, to the productive energy content of the ration. This has resulted in a method of calculating the most effective amount of methionine for any broiler ration on the basis of it's calorie content.

With this discovery, it is possible for the first time to calculate proper amounts of this essential nutrient for feeds of various energy levels, and predict the effect on feed efficiency. As feed research continues, the same principle may be applied to other critical nutrients, especially other amino acids.

Until the discovery of the relationship of feed energy content to diet requirements for methionine, there seemed no way of knowing what the response might be when various amounts of methionine were added to a certain diet. It was known, however, that supplementary methionine resulted in substantially higher feed efficiency and meat production in hundreds of laboratory experiments and feeding trials involving thousands of birds. A review of experimental work indicated a direct correlation between the energy content of feeds and the response to added methionine.

**Molasses**—Feed molasses prices were generally unchanged during the week ending June 14, 1955. The blackstrap market at New Orleans was steady at mostly 10c. per gallon, with a few sales or quotations at 10¼c.-10½c. and an occasional quotation reported as low as 9¾c. Demand was slow to moderate with supply adequate. Prices were steady for blackstrap at all East and West coast points. Demand was generally moderate except at Houston and Port Everglades where good demand prevailed. Supplies were generally adequate at all points except on the West coast where supplies were liberal.

Gross prices for Puerto Rican black-

*For Late Market Developments, See Page 4*

## *Price Trends*

**Advanced**

Zinc oxide, USP, ½c. per lb.

**Reduced**

Silver cyanide, ½c. per oz.
Nitrate, ⅜c. per oz.
Phenobarbital, USP, 50c. per lb.
Sodium, 50c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 67.14 | 67.16 | 67.18 | 68.83 |

*(For Current Prices see Page 9)*

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strap delivered to Puerto Rican ports were slightly higher than a week ago, with prices reported at 8¾c. per gallon. A large volume was sold f.o.b. mill tanks at 7¼c. per gallon.

**Phenobarbital**—Prices were cut 50c. per pound last week on phenobarbital, USP, and its sodium salt. The new schedule was $3.50 per pound in 100 pound lots, $3.65 in 25 pound lots and $3.85 in 5 pound lots.

**Rutin**—Inquiry for rutin was reported to be at routine levels. Supplies were adequate to cover current needs and expected to continue in the immediate future. A substantial amount of rutin is used in the drug industry in compounds used to combat capillary fragility and with the increasing importance of geriatric formulations was expected to come a stepup in overall demand.

**Silver Salts**—The silver salts were reduced again last week in the wake of a further reduction in the silver bullion market. Supplies were ample, while prices were lowered ⅜c. per ounce on silver nitrate and ½c., on the cyanide. The decline was the latest of several price changes in recent weeks, it was noted, and judging by the erraticity in bullion prices, was not to be the last.

The current price schedules were as follows:—Silver nitrate, in 2,500-ounce lots, 57c. per ounce, 1,000-ounce lots, 59¼c.; 500-ounce lots, 59¾c. and single 250-ounce bottles, 60¼c. per ounce. Silver cyanide prices were: 2,500-ounce lots, 80¼c. per ounce; 1,000-ounce lots, 80⅝c.; 500-ounce lots, 80¾c. and single 250-ounce bottles, 81c.

**Theophyllin** — The market was unchanged, with inquiry reportedly routine for this time of year. Supplies were adequate to cover consumer requirements while prices were steady.

**Zinc Oxide**—Following advances in recent weeks in the technical grades of zinc oxide, the USP grade was also hiked ½c. per pound. The new price schedule was 17¼c. per pound in carlots and 18¼c. in less than carlot quantities.

## Botanicals

The spot market was unchanged last week. New crop shipments of domestic botanicals have been generally satisfactory, to date, but adverse weather conditions in the Northwest have delayed and possibly limited collections of senega root there.

There appeared to be an abundance of labor for botanicals collection this year closely paralleling that of last year. In the coal fields, production at the mines continues limited and since there is very often no other source of employment in the coal fields, workers have turned to botanicals collection as a means of supplementing their incomes.

Imports from abroad continue at a fair rate. New crop orris root was expected to become available later this year. Meanwhile, spot stocks of this item were estimated to be sufficient to meet anticipated needs in coming months. Botanicals dealers were anticipating new crop chamomile flowers, true montana arnica flowers and juniper berries. Present stocks of true montana arnica flowers were nil although there were believed to be some lots of Mexican flowers available.

**Cohosh Root**—Inquiry was fair while supplies were adequate for trade needs. Currently cohosh root was quoted at 20-22c. per pound, on spot.

**Copaiba Balsam**—Demand for copaiba balsam was reported to be routine for this time of the year. Supplies were ample to cover current consumer needs while prices tended toward some weakness.

**Cramp Bark**—Collections were going satisfactorily, according to trade sources while demand was routine. Supplies were ample to cover consumer requirements at this time while prices ranged from 85c. to 90c. per pound.

**Elm Bark**—Peelings of new crop bark have brought inventories up to more satisfactory levels in recent months. Supplies were currently believed adequate while prices were holding at steady levels. Grinding grade bark ranged from 30c. to 32c. per pound while powdered bark was quoted at 45c. and select, in bundles, at 75c. per pound.

**Ipecac Root**—There appeared to be little change in the ipecac supply situation. European buyers have been seemingly indifferent to the comparitively high prices asked by shippers over the past year and as a result, current market prices have

been firmly maintained. The spot market was currently quoted at about $9 per pound for the whole root while powdered root was quoted at $10 to $10.25 per pound.

**Kola Nuts**—There have been little or offerings of kola nuts from Jamaica in recent weeks. The spot market was quite firm while the supply situation was generally considered fair. Consumption of this commodity is especially heavy as a flavoring extract during the warm weather months.

**Licorice Root**—There was no change reported in licorice root. Demand for this item is fairly uniform the year round since it is used in a number of diversified industries. Inventories were believed to be adequate to cover trade needs at present and the long range outlook was generally considered favorable.

**Senega Root**—Senega root prices continued firm last week. The strength of the market was ascribed to several factors, chief of which were the excessively wet weather conditions in Northwest growing areas earlier this Spring and reports that Europe had placed heavy orders for new crop material, thus cutting down on the amount of root available for sale to dealers in this market.

## Petroleum Crudes Output, Sales Increased in 1954

US output of crude products from petroleum and natural gas in 1954 was 12,941,000,000 pounds, compared with 11,147,000,000 pounds in 1953, an increase of 16 percent, according to preliminary data released by the Tariff Commission last week. Sales last year were 7,474,000,000 pounds, valued at $283,000,000, compared with 7,301,000,000 pounds, valued at $303,000,000, in the previous year.

Production of all aromatic and naphthenic products in 1954 was 2,874,000,000 pounds, an increase of 15 percent over 1953. Sales in 1954 amounted to 2,026,000,000 pounds, valued at $79,000,000, compared with 1,795,000,000 pounds, valued at $73,000,000, in 1953, an increase of 13 percent in quantity and 8 percent in value.

The output of benzol (except motor-grade) from petroleum was 674,000,000 pounds in 1954, or 46 percent more than in 1953. Production of toluol was 890,000,000 pounds in 1954, compared with 836,000,000 pounds in 1953. The output of xylol decreased to 726,000,000 pounds in 1954 from the 749,000,000 pounds reported for 1953.

Production of aliphatic hydrocarbons in 1954 was 10,067,000,000 pounds, an increase of 1,426,000,000 pounds from the 8,641,000,000 pounds reported for 1953. Sales of aliphatic hydrocarbons amounted to 5,448,000,000 pounds, valued at $204,000,000, in 1954, compared with 5,506,000,000 pounds, valued at $230,000,000, in 1953. The lower value of sales for aliphatic hydrocarbons in 1954, compared with 1953 was due principally to the decreased sales of 1,3-butadiene.

The production of ethylene in 1954 was 2,345,000,000 pounds, compared with an output of 2,136,000,000 pounds in 1953. Propane production in 1954 was 1,675,000,000 pounds, and production of propylene and propane-propylene mixture was 1,204,000,000 pounds. In 1953 propane production was 1,366,000,000 pounds, and that of propylene and propane-propylene mixture was 1,223,000,000 pounds. Production of butadiene, one of the ingredients of GR-S type synthetic rubber, was 809,000,000 pounds in 1954, compared with 1,152,000,000 pounds in 1953.

## Bids Wanted

**Alcohol**—1,150 5-gal. dms.; alcohol denatured, 180 gal. cns.; ether absolute, 744 1-lb. cns., ether 17,760 ¼-lb. cns., ethyl chloride 432 10-gm. bots., medicinal soft soap 1,800 25-lb. dms., inv. A-577, June 27; 7,200 lbs. sodium hydroxide, tech., for cleaning purposes, in 400-lb. metal dms., 11,100 lbs. sodium metasilicate, 110-lb. containers, 5,000 lbs. sodium thiosulfate, photographic, 100-lb. fib. dms., 11,000 lbs. trisodium phosphate, tech., 100-lb. fib. dms., plywood dms. or bbls., inv. KC-39424, June 27, General Services Adm., Business Service Center, Region 6, 2306 E. Bannister Rd., Kansas City 14, Mo., 1,400 lbs. potassium cyanide, 5,600 lbs. potassium dichromate, tech., 5,000 lbs. sodium chromate, tech., 33,000 lbs. sodium cyanide, tech., 41,000 lbs. sodium phosphate, dibasic, anhyd., tech., east and west coast, inv. 155 (1)—1354, June 29, General Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

**Alum**, granulated, 700 lbs., 100-lb. bgs., inv. 195, June 23, Purchasing Div., Atlanta General Depot, Atlanta, Ga.

**Calcium Carbide**, tech., 1,800,000 lbs., inv. 189-293, June 22, Navy Purchasing Office, Naval Supply Center, Norfolk, Va.

**2, 4-D ester**—herbicide, liq., 12 50 to 55-gal. dms., Hardeeville, S. C., Wakulla, Fla., inv. FW4-2037, June 23, Interior Dept., Fish & Wildlife Service, 620A Peachtree-Seventh Bldg., Atlanta, Ga.

**Disinfectant**, germicidal and fungicidal, phenol-type, liq., 49,457 2-oz. cont., east and west coast, inv. 926, June 28, Phila. QM Depot, 2800 S. 20th St., Phila. 45, Pa.

**Drugs:** aminophylline tabs. 960 bots. of 100, ammonium chloride tabs., 6,528 bots. of 100, ascorbic acid tabs., 4,416 bots. of 100, dicalcium phosphate tabs., 192 bots. of 100, glyceryl trinitrate tabs., 2,304 bots. of 100, also, 1,536 bots. of 100, nicotinamide tabs., 144 bots. of 500, saccharin sodium tabs., 9,072 bots. of 100, sodium salicylate tabs. 240 bots. of 100, triasyn B tabs., 528 bots. of 1,000, inv. A-561, June 27, Veterans Adm., Procurement Div., Veterans Adm. Bldg., Washington 25, D. C.

**Lime**, agricultural, approx. 80 tons, inv. 25-3195, June 28, Justice-Prisons, Federal Correctional Institution, Tallahassee, Fla.; lime, hydrated, as follows: aluminum sulfate (filter alum), type II, class 2, grd., water treatment, for period from date of contract thru June 30, 1956, Elephant Butte, N. Mex., inv. 503-890, June 28, Interior Dept., Bur. of Reclamation, Rio Grande Project, 211 U. S. Court House, El Paso, Tex.

**Paint**, enamel, for period from July 1, 1955 thru January 31, 1956, Newark, inv. NY-3D-63156, June 21; paint for period from July 1, 1955 thru January 31, 1956, inv. NY-3D-63157, June 23; General Services Adm., Region 2, Business Service Center, 250 Hudson St., N. Y. 13, N. Y., paint, ship bottom, anti-corrosive, 2,800 gals., enamel, synth., semi-gloss, 829 gals., paint, ship bottom, anti-corrosive, 8,085 gals., various dest., inv. 383-1076, June 27, Aviation Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa., paint, oil, interior, 100 gals. flat, 936 gals. oil, interior nonpenetrating, ready-mixed, 1,600 gals., oil, interior, flat, wall, 1,200 gals., resin-base emulsion interior paste, for thinning with cold water, inv. 3T-62982, July 1, General Services Adm., Business Service Center, 7th and D Sts., S. W., Washington, D. C., paint, pigment, 2,360 lbs. 60 gals. varnish, shellac, orange, inv. DA-43540, June 28, General Services Adm., Business Service Ctr., 250 Hudson St., N. Y. 13, N. Y. paint, latex base, interior, flat, 1,480 gals., inv. 3T-62987, July 1, General Services Adm., Business Service Ctr., 7th and D Sts., S. W., Washington, D. C. paint, deck, 50 gals., pigments, dry, 12,000 lbs., pigments, paste-in-oil, 1,000 cks., inv. 5529-A, June 27, Panama Canal Co., Procurement Div., 21 West St., N. Y. 6, N. Y.

**Zinc chloride**, crystals or granular, tech. grade, 312,000 lbs., inv. 251-106-B, June 23, Supply Dept., Puget Sound Naval Shipyard, Bremerton, Wash.


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## Chas. Pfizer & Co. Forms New Japanese Drug Firm

Formation of a new Japanese-American company for the basic manufacture of Pfizer antibiotics and pharmaceuticals has been announced by John J. Powers, jr., senior vice-president of Pfizer. President of the new company, known as Pfizer-Taito Co., Ltd., is Katsunobu Masuda, who is also executive vice-president of Taito Co., Ltd. Taito is one of Japan's largest penicillin producers.

Mr. Powers reported that in addition to expansion of present Japanese packaging facilities for the broad-spectrum antibiotics, "Terramycin" and "Tetracyn," preparations are under way for basic production. New equipment and facilities will be added as required in the Pfizer-Taito plant at Kobe. Other antibiotics, as well as vitamins, steroid products and Pfizer pharmaceutical specialties, will also be produced in the new plant eventually.

Carl Blum has been appointed senior managing director of Pfizer-Taito. A team of Pfizer production engineers, headed by Kingdon Doscher, is being assigned to train Japanese engineers and other personnel in the specific technical processes involved. The firm of Gohei Tanabe & Co., Ltd., a leading Japanese pharmaceutical house, will continue to distribute "Tetracyn" and "Terramycin," as well as other Pfizer-Taito products.

## Emery Industries Appoints

The appointment of Dr. Karl T. Zilch to the research staff of Emery Industries, Inc., Cincinnati, Ohio, has been announced. Dr. Zilch will be directly connected with the fatty acids and esters laboratory. He was earlier associated with the oil and protein division of the northern utilization research branch of the Department of Agriculture.

## Steel Shipping Barrels Output In April Is Below That of March

April production of steel shipping barrels and drums on an average working day basis was 5 percent below that of March but 3 percent above shipments in April, 1954, according to the Bureau of Census. During the month the industry turned out 1,989,904 heavy-type steel barrels and drums, 914,024 light-type steel barrels and drums, and 6,674,064 steel shipping packages, kegs and pails. This compares with 2,124,565 heavy-type steel shipping barrels; 935,576 light-type steel shipping barrels, and 6,413,013 steel shipping packages, kegs and pails in March.

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## Nat'l Science Foundation Details Grants for Quarter

The National Science Foundation has announced 297 grants totaling about $2,810,000 awarded during the quarter ending March 31, 1955, for the support of basic research in the natural sciences, for conferences and studies on science, scientific information exchange, for the scientific manpower register, and for attendance at scientific meetings.

This is the third group of awards to be made during fiscal year 1955 by the foundation for the support of basic research and related matters. Since the beginning of the program in 1951, over 1,500 such awards have been made, totaling about $15,560,000. The research fields included are astronomy, chemistry, developmental biology, earth sciences, engineering sciences, environmental biology, genetic biology, mathematical sciences, molecular biology, physics, psychobiology, regulatory biology and systematic biology.

## Frank Samuel Named Agent

Frank Samuel & Co., New York, has announced that it is acting as agent and distributor in the United States for Carnegies of Welwyn, Ltd., Welwyn Garden City, Hertfordshire, England. Frank Samuel will handle such items as theobromine, all quinine salts, brucine salts, strychnine salts, atropine, tropine and homatropine compounds. The company will carry stocks in its New York and Philadelphia warehouses.

## Penick Vice-Pres. Retires

Harold Noble, vice-president in charge of the insecticide division of S. B. Penick & Co., New York, has retired after thirty-eight years' association with the firm. He will continue as a member of the board of directors. Frank Seeland, who has been active in management of the division for some time, has now assumed full charge.

### *Metal Cans Shipments: April*

Total shipments of metal cans in April were 4 percent above shipments during March, according to the Bureau of Census. These figures are based on metal cans shipments expressed in terms of weight of steel consumed in the manufacture of the cans shipped. In April, metal cans shipments ,amounted to 321,345 short tons compared with the March figure of 307,939 short tons and a figure of 324,039 short tons in April, 1954.

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# Imports at United States Ports

### *New York*

ALUMINUM SULFATE—440 bgs, Rotterdam
BIFLUORIDE—55 cks, Interstate Chemical Corp, Bremen
NITRATE—1 cs, Amend Drug & Chemical Co, Bremen
ANILINE DYES—2 dms, Hensel Bruckmann & Lorbacher, Rotterdam
35 dms, Ciba Co, Rotterdam
32 dms, C A Haynes, Hamburg
52 dms, Hensel Bruckmann & Lorbacher, Hamburg
2 dms, Ciba Co, Bremerhaven
26 dms, Sandoz Chemical Works, Havre
4 dms, Hanover Bank, Rotterdam
4 dms, C A Haynes, Rotterdam
18 dms, Geigy Chemical Corp, Rotterdam
45 dms, Carbic Color & Chemical Co, Rotterdam
4 cks, Havre
ANTIMONY OXIDE—182 bgs, C Gitlan, Antwerp
ARAROBA ROOT—35 cs, Hollander Trading Corp, Rio de Janeiro
ASAFETIDA GUM—100 cs, S B Penick & Co,
ASBESTOS FIBER — 1,300 bgs, Johns Manville Corp, Lourenco Marques
140 bgs, N American Asbestos Corp, Lourenco Marques
700 bgs, N American Asbestos Corp, Durban
400 bgs, Ovimpex Inc, London
ASPIDOSPERMA BARK—6 bgs, S B Penick & Co, Georgetown
Rotterdam
BARBASCO POWDER—1,800 bgs, Astoria Panamericana, Iquitos
BARIUM CYANIDE—1 cs, Amend Drug & Chemical Co, Rotterdam
OXIDE—4 dms, Lo Curto & Funk, London
BEESWAX—18 bgs, H H Pike & Co, Tampico
65 bgs, Marcel Calvet, Ciudad Trujillo
68 bgs, Curacao Trading Co, Ciudad Trujillo
67 bgs, Smith & Nicols, Puerto Alegre
40 bgs, Santiago
BENZOIN GUM—61 bdls, Meer Corp, Singapore
BISMUTH—64 cs, Cerro de Pasco Corp, Callao
BOIS DE ROSE OIL—5 dms, Fritzsche Bros, Belem-Para
BONE—238 bgs, Ovimpex Inc, Santos
BUTYROLACTONE—113 dms, Hensel Bruckmann & Lorbacher, Rotterdam
CADMIUM—20 cs, Cathay Mercantile Corp, Yokohama
CALCIUM CARBIDE—1 cs, Interstate Chemical Corp, Bremen
CAMPHOR OIL—25 dms, Dodge & Olcott, Kobe
CARAWAY SEED—700 bgs, C M Van Sillevoldt, Rotterdam
300 bgs, A Gronowitz, Rotterdam
525 bgs, R J Spitz, Rotterdam
150 bgs, Levy & Levis Co, Rotterdam
500 bgs, Rotterdam
CARNAUBA WAX—63 bgs, Strahl & Pitsch, Rio de Janeiro
188 bgs, Frank B Ross, Parnahiba
439 bgs, Parnahiba
CASEIN—100 bgs, Carlos A Sayous, Buenos Aires
1,000 bgs, Tupman Thurlow, Buenos Aires
550 bgs, Crawford Kish & Co, Rotterdam
3,100 bgs, Borden Co, Buenos Aires
500 bgs, Hodges International Inc, Buenos Aires
1,000 bgs, P A Dunkel, Buenos Aires
1,800 bgs, Buenos Aires
CASSIA—331 bls, P H Petry, Rotterdam
167 bls, R J Spitz, Rotterdam
1,701 bls, Rotterdam
177 bls, Karl H Landes & E Balint, Rotterdam
176 bls, A G Dunn, Rotterdam
CASTOR BEANS—5,080 bgs, Baker Castor Oil Co, Salvador
669 bgs, Baker Castor Oil Co, Manta
OIL—300 tons, Woodward & Dickerson, Salvador
298 tons, Baker Castor Oil Co, Rotterdam
200 tons, Recife
CELERY SEED——44 bgs, C Czarinkow, Bombay
88 bgs, Otto Gerdau, Bombay
437 bgs, A G Dunn, Bombay
174 bgs, Louis Furth, Bombay
87 bgs, Frank Tea & Spice Co, Bombay
261 bgs, C M Van Sillevoldt, Bombay
CITRONELLA OIL—72 dms, Lo Curto & Funk, Rotterdam
15 dms, East Asiatic Co, Keelung
46 dms, Rotterdam
129 dms, London
CLAY—12 dms, Transmares Corp, Antwerp
COALTAR DYES—4 dms, Interocean Chemicals & Minerals Corp, Rotterdam
2 dms, Verona Dyestuffs, Rotterdam
6 dms, C A Haynes, Havre
9 cks, Hensel Bruckmann & Lorbacher, Rotterdam
19 dms, Hensel Bruckmann & Lorbacher, Rotterdam
19 cans, Hensel Bruckmann & Lorbacher, Rotterdam
12 dms, Rotterdam
COCHINEAL—70 bgs, Callao
COCONUT OIL—800 tons, Lu Do & Lu Ym Corp, Cebu
430 tons, American Trust Co, Zamboanga
COD OIL—200 dms, Bremen
COLOMBO ROOT—102 bgs, Lourenco Marques
COPAIBA BALSAM—5 dms, Morris Hess Co, Manaus
9 dms, Lautier Fils Inc, Bremen-Para
COPAL GUM—84 bgs, Gillespie Rogers Pyatt, Matali
5 bgs, Archer Daniels Midland Co, Matadi
62 bkts, J Berlage, Rotterdam
COPPER OXYCHLORIDE—200 bgs, Riches Nelson, Antwerp
CORNMINT OIL—2 dms, A Maschmeijer Jr, Santos
COTTON LINTERS—215 bls, New England Waste Co, Recife
142 bls, Wood Niebuhr Co, Santos
CRESYLIC ACID—27 tons, H A Gogarty, London
100 dms, M W Hardy & Co, London
CUBE ROOT—576 bls, Hecht Levis & Kahn, Iquitos
CUTTLEFISH BONE—74 ctns, Guaranty Trust Co, Kobe
DAMMAR GUM—70 bgs, O G Innes Corp, Singapore
70 bgs, Internatio Rotterdam, Singapore
50 cs, Archer Daniels Midland Co, Bangkok
32 bgs, Wm H Scheel, Singapore
30 bgs, O G Innes Corp, Bangkok
80 cs, O G Innes Corp, Bangkok
DANDELION ROOT—67 bls, Meer Corp, Hamburg
DEXTRIN—2,121 bgs, Stein Hall & Co, Rotterdam
1,118 bgs, Guaranty Trust Co, Rotterdam
100 bgs, S S Stafford Inc, Rotterdam
DIACETYL—4 cs, Dorf International Ltd, Rotterdam
DIAMINE—17 dms, Naftone Inc, Rotterdam
DIVI DIVI—1,285 seroons, Curacao Trading Co, Puetro Plata
EARTH COLOR—740 bgs, Reichard Coulston, Laranca
EUCALYPTUS OIL—10 dms, Lo Curto Funk, Kobe
FENUGREEK SEED—132 bgs, Wm E Martin, Bombay
171 bgs, S B Penick & Co, Bombay
FISHLIVER OIL—7 dms, Arista Oil Products Co, Yokohama
4 dms, Albumina Supply Co, Yokohama
12 dms, J D Smith Interocean, Yokohama
FISHMEAL—1,097 bgs, Wessel Duval & Co, Chimbote
FUEL OIL—164,859 bbls, Esso Standard Oil Co, Aruba
108,781 bbls, Esso Export Corp, Aruba
95,337 bbls, Hess Inc, El Segundo
126,031 bbls, Metropolitan Petroleum Corp, Punta Cardon
326,174 bbls, Paragon Oil Co, Tampico
128,845 bbls, Asiatic Petroleum Corp, Curacao
105,485 bbls, Metropolitan Petroleum Corp, Puerto La Cruz
132,940 bbls, Curacao
GALL, OX—5 bbls, Tupman Thurlow, Santos
GAMBOGE GUM—10 cs, S B Penick & Co, Bangkok
GARLIC OIL—5 cs, Fritzsche Bros, Kobe
GELATIN—20 dms, D H Burdett, London
20½ bgs, Hensel Bruckmann & Lorbacher, Rotterdam
303 bgs, Manufacturers Trust & Co, Hamburg
93 bbls, Riches Nelson, Antwerp
14 bbls, Coignet Chemical Co, Antwerp
GERMANIUM OXIDE—102 cs, American Metal Co, Antwerp
GHATTI GUM—44 bgs, S B Penick & Co, Bombay
79 bgs, Colony Import & Export Corp, Bombay
171 bgs, P A Dunkel, Bombay
171 bgs, Morningstar Nicol, Bombay
GINGER—83 bgs, Arnhold & Co, London
40 bgs, Chase Manhattan Bank, Lagos
94 bgs, Freetown
ROOT—191 bgs, Irving Trust Co, Freetown
91 bgs, J H Schrader, Freetown
488 bgs, Freetown
GLUESTOCK—299 bdls, John Gorvers & Co, Barranquilla
502 bdls, A M Goldstein, Barranquilla
GLYCERINE—300 tons, Procter & Gamble, Manila
GOURD OIL—1 jug, John Groller, Bremen
GRAPHITE—2,611 bgs, Asbury Graphite Mills, Trondheim
625 bgs, Eagle Pencil Co, Bremen
GUANIDINE CARBONATE—20 dms, Terra Chemicals Inc, Bremen
GYPSUM—5,599 tons, U S Gypsum Co, Hantsport
HYDROGEN PEROXIDE—107 dms, Independent Chemical Corp Hamburg
ICHTHAMMOL—17 dms, Rohner Gehrig, Hamburg
INDIGO—4 cks, Havre
IODINE, CRUDE—50 kgs, Rosenthal Bercow, Yokohama
164 kgs, Antony Gibbs & Co, Tocopilla
IPECAC ROOT—10 bgs, Meer Corp, Cristobal
KAOLIN—300 kgs, E Fougera & Co, London
KARAYA GUM—122 bgs, S R Quibell, Bombay
66 bgs, Meer Corp, Bombay
310 bgs, Morningstar Nicol, Bombay
200 bgs, Stein, Hall & Co, Bombay
122 bgs, Brown Bros, Bombay
61 bgs, Thurston & Braidich, Bombay
176 bgs, Jacques Wolf & Co, Bombay
47 bgs, Orbis Products Corp, Bombay
LIME OIL—3 dms, Lo Curto & Funk, Tampico
3 dms, Lo Curto & Funk, Vera Cruz
LIVER POWDER—18 dms, Tec Chemical Corp, Montevideo
LOCUSTBEAN GUM—40 bgs, Orbis Products Corp, Trieste
250 bgs, Morningstar Nicol, Trieste
50 bgs, T M Duche & Sons, Trieste
200 bgs, Heemsoth Kerner, Amsterdam
100 bgs, H P Rossiger & Co, Hamburg
200 bgs, Cuaranty Trust Co, Rotterdam
150 bgs, Rotterdam
MACE—18 cs, R J Spitz, Rotterdam
43 bgs, Rotterdam
40 cs, Rotterdam
MANGANESE HYPOPHOSPHITE — 4 cks, R J Saunders, Bremen
MANGROVE BARK—1,900 bgs, Barkey Importing Co, Tumaco
585 bgs, Marcel Calvet, Esmeraldas
EXTRACT—2,000 bgs, Saxe Cutch Corp, Sandakan
MERCURY—325 flks, Lo Curto & Funk, Tampico
METHYLNAPHTHALENE—6 bbls, Henley & Co, Rotterdam
MINERAL WAX — 20 bgs, Dura Commodities Corp, Bremen
MOLASSES—787,776 gals, Instituto Cubano de Est del Azucar, Boqueron
1,048,717 gals, Instituto Cubano de Est del Azucar, Santiago
MYROBALANS—8,250 bgs, Barkey Importing Co, Bombay
640 bgs, Olson Sales Agency, Bombay
NAPHTHALENE—1,000 bgs, Gallard Schlesinger, Havre
785 bgs, Standard Naphthalene Products Co, Amsterdam
1,312 bgs, Rotterdam
502 bgs, Antwerp
NAPHTHOL—9 dms, Hensel Bruckmann & Lorbacher, Rotterdam
10 dms, Rotterdam
NICKEL CARBONATE—38 dms, Atlantic Bank of N Y, London
SULFATE—80 bbls, Hanover Bank, Bremen
91 bgs, I M Sobin, Hamburg
NUTMEG—48 bgs, D Hecht & Co, Rotterdam
57 bgs, Kellys America Ltd, London
160 bgs, A G Dunn, Grenada
50 bgs, Fuerst Bros, Grenada
50 bgs, R J Spitz, Grenada
100 bgs, Rotterdam
134 bls, Rotterdam
OCOTEA CYMBARUM OIL—75 dms, Bank of London & S A, Rio de Janeiro
200 tons, Recife
PALMKERNEL OIL—488 tons, Matadi
PATCHOULI OIL—2 dms, Givaudan Corp, Penang
8 dms, Calvert Vavasseur, Penang
PEATMOSS—750 bls, E J Lang, Bremen
1,500 bls, Lion Trading Co, Bremen
500 bls, C Fafard, Bremen
2,500 bls, Trans Sphere Trading Co, Bremen
500 bls, Bruco Peatmoss Corp, Bremen
718 bls, New Amsterdam Import Co, Bremen
2,950 bls, Premier Peatmoss Corp, Bremen
1,800 bls, Marine Midland Trust Co, Bremen
420 bls, Halfmoon Manufacturing & Trading Co, Rotterdam
1,876 bls, C Gastmeyer, Rotterdam
PEPPER, BLACK—70 bgs, A G Dunn, Singapore
595 bgs, Joensson & Cross, Singapore
70 bgs, A C Israel, Singapore
140 bgs, Borneo Sumatra Trading Co, Singapore
140 bgs, Internatio Rotterdam, Singapore
84 bgs, Kellys America Ltd, Rotterdam
60 bgs, M Golodetz, London
80 bgs, Polak Trading Co, Cochin
70 bgs, Otto Gerdau, Singapore
80 bgs, Otto Gerdau, Cochin
35 bgs, J Berlage, Singapore
1,380 bgs, Alleppey
211 bgs, Rotterdam
1,360 bgs, Cochin
WHITE—379 bgs, Internatio Rotterdam, Pangkal Pinang
48 bgs, Mincing Trading Corp, Pangkal Pinang
28 bgs, C Czarinkow, Singapore
PETROLEUM, CRUDE—196,848 bbls, Phillips Petroleum Co, Puerto La Cruz
95,176 bbls, Cities Service Oil Co, Tampico
111,701 bbls, Cities Service Oil Co, Las Piedras
385,516 bbls, Socony Mobile Oil Co, Puerto La Cruz
POLLACKLIVER OIL—46 dms, Arista Oil Products Co, Yokohama
25 dms, Consumers Import Co, Yokohama
100 dms, Scandinavian Oil Co, Yokohama
50 dms, J D Smith Interocean, Yokohama
POLYVINYL CHLORIDE RESIN—2,835 bgs, Monsanto Chemical Co, Nagoya
POPPY SEED—100 bgs, Levy & Levis Co, Rotterdam
200 bgs, Rotterdam
POTASSIUM FERROCYANIDE—800 bgs, Haras Co, Rotterdam
SILICATE—1,034 bgs, Sylvania Electric Products, Rotterdam
POTATO FLOUR—213 bgs, Morningstar Nicol, Havre
STARCH—170 bgs, Rotterdam
PSYLLIUM SEED HUSKS—821 bgs, River Plate Corp, Bombay
450 bgs, T M Duche & Sons, Bombay
439 bgs, Meer Corp, Bombay
439 bgs, S B Penick & Co, Bombay
QUINIDINE SULFATE—5 dms, Lo Curto & Funk, Hamburg
2 bxs, Lo Curto & Funk, Hamburg
RADIUM ELEMENT—1 cs, Radium Chemical Co, Antwerp
RAPESEED—330 bgs, Catz American Co, Rotterdam
RAUWOLFIA HETEROPHYLLA ROOT—80 bgs, Lo Curto & Funk, Puerto Barrios
RICE STARCH—234 bgs, American Key Products, Trieste
ROSEWOOD OIL—90 dms, Manaus
10 dms, Hollander Trading Corp, Belem-Para
10 dms, Fritzsche Bros, Paramaribo
3 dms, Hollander Trading Corp, Iquitos
SALICYLIC ACID—20 dms, Industrial Chemical & Dye Co, Rotterdam
SANDALWOOD OIL—4 cs, Volkart Bros, Bombay
SASSAFRAS OIL, ARTIFICIAL—20 dms, Ungerer & Co, Kobe
SCARLET BASE—5 dms, Hensel Bruckmann & Lorbacher, Rotterdam
SEEDLAC—250 bgs, C H Timm, Bangkok
500 bgs, East Asiatic Co, Bangkok
250 bgs, United Shellac Corp, Bangkok
100 bgs, Unity Import Export Co, Bangkok
730 bgs, Bangkok
SERPENTINA ROOT—7 bgs, E R Squibb & Sons, Colombo
SHARKLIVER OIL—5 dms, Silmo Chemical Corp, Yokohama
SOAPBARK—88 bls, Parker Trading Co, Valparaiso
SODIUM CHLORIDE—50 dms, Hamburg
CYANIDE—440 dms, Hamburg
SPERM OIL—272 tons, Pisco
STEARINE—4 bgs, P J Meeghan, London
STRONTIUM CHLORIDE—25 cks, Hummel Chemical Co, Rotterdam
LACTATE—4 dms, Lo Curto & Funk, Bremen
SULFADIAZINE—13 cs, Conray Products Co, Yokohama
SWORDFISHLIVER OIL—10 dms, Consumers Import Co, Yokohama
TANNING EXTRACT—31 bbls, Geigy Chemical Corp, Rotterdam
TAPIOCA FLOUR—1,000 bgs, Harry F R Dolan, Bangkok
THIOUREA—300 bgs, Baird Chemical Corp, Kobe
TONKA BEANS—220 bbls, Kennedy Butcher & Co, La Guaira
TRICHLOROETHYLENE—400 dms, Miny Corp, Venice
TURMERIC—160 bgs, Volkart Bros, Cochin
160 bgs, Cochin
VETIVER OIL—3 dms, Givaudan Corp, Penang
WATTLE BARK—1,671 bls, Hammond & Carpenter, Durban
EXTRACT—1,539 bgs, Hammond & Carpenter, Durban
748 bgs, River Plate Corp, Durban
WHITING—1,400 bgs, Pluess Staufer, Antwerp
1,200 bgs, N H Weitzner, Antwerp
25 bbls, N H Weitzner, Antwerp
WOOL GREASE—27 dms, N I Malmstrom, Rotterdam
7 dms, Eelsingh & Lugtigheid, Rotterdam

### *Los Angeles*

AGAR—7 cs, Hathaway Allied Products, Shimizu
18 casks, Hilner International Corp, Copenhagen
17 cs, Moorhead & Co, Yokohama
18 casks, Moorhead & Co, Copenhagen
COPAL GUM—69 bkts, O G Innes Corp, Djakarta
COPRA—1,520 long tons, Procter & Gamble Co, Jolo
500 long tons, American Trust Co, Jolo
CAKE—3,600 bgs, Balfour Guthrie & Co, Manila
6,720 bgs, Wilbur Ellis Co, Manila
4,480 bgs, Atkins Kroll & Co, Manila
6,720 bgs, Wilbur Ellis Co, Manila
2,240 bgs, American Trust Co, Zamboanga
5,320 bgs, Pacific Vegetable Oil Corp, Zamboanga
2,240 bgs, Pacific Vegetable Oil Corp, Manila
PETROLEUM, CRUDE—235,690 bbls, Texas Co, Sidon
CUMIN SEED—227 bgs, Rotterdam
232 bgs, Overseas Shipping Co, Rotterdam
DAMMAR GUM—70 bgs, Borneo Sumatra Trading Co, Singapore
INSECTICIDE—40 dms, Trinity Trading Corp, Copenhagen
MOLASSES—5,539 tons, National Molasses Co, Mazatlan
5,578 tons, National Molasses Co, Manzanillo
PAPRIKA—200 bgs, Sopac Transport Co, Marseille
PEPPER, RED—140 bgs, Cal-Compack Foods, Inc, Kobe
TAPIOCA FLOUR—2,382 bgs, Stein Hall & Co, Tjirebon

### *Philadelphia*

ANTIMONY—120 cks, Watson Geach, Middlesbrough
REGULUS—95 bgs, Rijeka
BONE—701 tons, Credit Suisse, Rosario
CASEIN—550 bgs, F H Paul & Stein Bros, Rotterdam
CASTOR OIL—230 tons, Rohm & Haas, Calcutta
235 tons, East Asiatic Co, Bombay
497 tons, Rohm & Haas, Bombay
100 tons, Woodward & Dickerson, Salvador
COCOA RESIDUE—1,010 bgs, Bordeaux
CRESYLIC ACID—200 dms, Concord Chemical Co, Manchester
EPSOM SALT—400 bgs, Woodward & Dickerson, Hamburg
FUEL OIL—114,000 bbls, Esso Standard Oil Co, Aruba
IRON OXIDE—81 tons, Malaga
LOCUSTBEAN GUM—150 bgs, T M Duche & Sons, Genoa
MOLASSES—826,450 gals, Southwestern Sugar & Molasses Co, Point a Pitre
1,947,764 gals, Matanzas
NAPHTHALENE—1,511 bgs, Barrett Division, Hull
332 bgs, Barrett Division, Middlesbrough
1,000 bgs, Friedman Co, Antwerp
3,556 bgs, Rotterdam
2,936 bgs, Antwerp
4,258 bgs, Gdynia
PARIS WHITE—2,400 bgs, Hammill & Gillespie, Hull
PEANUT OIL—320 tons, Simmonins & Sons, Hull
PEATMOSS—1,000 bls, Keer Maurer, Bremen
350 bls, Van Zanten, Bremen
1,057 bls, Halfmoon Manufacturing & Trading Co, Rotterdam
1,100 bls, Vandergrift Co, Bremen
1,000 bls, Credit Suisse, Hamburg
700 bls, Premier Peatmoss Corp, Bremen
2,000 bls, E Dunwoody, Bremen
PETROLEUM, CRUDE—309,679 bbls, The Texas Co, Las Piedras
267,610 bbls, The Texas Co, Puerto La Cruz
80,528 bbls, The Texas Co, Pamatacual
218,638 bbls, Socony Vacuum Oil Co, Mena Al Ahmadi
114,414 bbls, Gulf Oil Corp, Mena Al Ahmadi
240,123 bbls, Gulf Oil Corp, Puerto La Cruz
251,281 bbls, Atlantic Refining Co, Pamatacual
126,524 bbls, Atlantic Refining Co, Tripoli
121,955 bbls, Atlantic Refining Co, Puerto La Cruz
RAPESEED—1,100 bgs, R T French Co, Rotterdam
SHELLAC—50 bgs, Calcutta
35 bgs, Bremen
TANNING EXTRACT—1,496 bgs, Tanimex Corp, Marseille
UREA—8,000 bgs, Chemical Manufacturing Co, Middlesbrough
WHITING—221 tons, Pluess Staufer, Antwerp

### *San Francisco*

ANTIMONY OXIDE—27 bgs, C Gitlan & Co, Gothenburg
BONEMEAL—1,103 bgs, Antwerp
CALCIUM SULFATE—1,771 tons, Kaiser Gypsum Co, San Marcos
CASSIA—191 bls, Borneo Sumatra Trading Co, Djakarta
COPRA—5,00 tons, American Trust Co, Cebu
500 tons, Pacific Vegetable Oil Corp, Legaspi
500 tons, Pacific Vegetable Oil Corp, Zamboanga
160 tons, Pacific Vegetable Oil Corp, Cebu
DEXTRIN—50 bgs, Adhesive Products Inc, Amsterdam
EARTH COLOR—450 bgs, Naftone Inc, Bremen
EPSOM SALT—400 bgs, Matoon & Co, Bremen
GELATIN—47 bbls, Coignet Chemical Co, Antwerp
LOCUSTBEAN GUM—150 bgs, Genoa
NICKEL CHLORIDE—4 tons, A T Hanseatic Corp, Bremen
OLIVE OIL—500 dms, A Giurlani & Bro, Leghorn
PAPRIKA—200 bgs, Schilling & Co, Marseille
PEPPER, BLACK—80 bgs, Volkart Bros, Cochin
40 bgs, Guaranty Trust Co, Cochin
48 bgs, Plantation House, Cochin
49 bgs, Internatio Rotterdam, Singapore
80 bgs, Mincing Trading Corp, Singapore
160 bgs, Alleppey
PETROLEUM, CRUDE—166,403 bbls, Tide Water Associated Oil Co, Sungai Pakning
35,951 tons, Standard Oil Co, Sungai Pakning
QUEBRACHO EXTRACT—100 bgs, H J Boutin & Son, Gothenburg
SALICYLIC ACID—10 dms, Gothenburg
SODIUM GLUTAMATE, MONO—25 cs, Universal Sales Co, Yokohama
TURMERIC—52 bgs, Mincing Trading Corp, Cochin
80 bgs, Alleppey
WHITING—1,000 bgs, Pluess Staufer, Antwerp
WOOL GREASE—50 dms, Gallard Schlesinger, Antwerp

## Aerosol Sales, Shipping Data Are Offered by CSMA

A revised digest of federal and municipal regulations covering sale and shipment of pressurized aerosol products and manufacturing and sale practices for aerosol products, have been prepared by the chemical Specialities Manufacturers' Association.

The revised digest deals primarily with regulations of the Interstate Commerce Commission as to labeling, product definitions, and shipping container specifications. Separate sections are devoted to regulations of such other agencies as the Association of American Railroads, American Trucking Association, The Compressed Gas Association, Inc., Department of Agriculture, Federal Trade Commission, Food and Drug Administration, Post Office Department, Public Health Service, the states of New York, New Jersey, Illinois, and California, and the cities of Buffalo, Cleveland, and New York.

The "Manual for Vendors and Fillers of Aerosols and Pressurized Packages" includes sections on labeling, premarketing product checks, filler safety tips, and postal regulations on mailing of pressurized packages. Separate sections are devoted to an illustrated explanation of laboratory tests for flammability and to recommended minimum fills for various sizes of the push-button containers in which more than eighty-five different types of products now are available.

The price of the digest, punched for insertion in standard five-ring, six by nine-inch binders, is $6, including postage in the United States and Canada. Copies of the manual, punched for insertion in standard three-ring binders, are available at 50 cents per copy from the Chemical Specialties Manufacturers' Association, 50 East 41st street, New York 17.

## American Cyanamid Is Awarding 17 Scholarships, 14 Fellowships

American Cyanamid Company, New York, has announced that seventeen undergraduate scholarships and fourteen graduate fellowships will be awarded in chemistry and chemical engineering for the academic year 1955-56. Under the company's undergraduate scolarship program, now in its second year, junior or senior students selected by their university or college authorities will receive $600 each for the academic year, while the school will receive $300 for the unrestricted use of its chemistry or chemical engineering department.

Under the fellowship program, Cyanamid will award $1,500 plus full tuition and laboratory fees to graduate students in their final pre-doctoral year. Their school's chemistry or chemical engineering department will receive $300 for unrestricted use.

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## Merritt-Chapman Files Fiscal Data With SEC

The Securities and Exchange Commission has announced that Merritt-Chapman & Scott Corporation has filed a registration statement covering $25,000,000 of convertible subordinated debentures, due July 1, 1975.

Of the net proceeds, $19,100.000 will be used as follows:—$9,000,000 to the payment of outstanding short term notes; $3,600,000 to be advanced to Devoe & Raynolds Company, Inc., a subsidiary, for the repayment of outstanding short term notes of that company; and $6,500,000 will be advanced to Tennessee Products & Chemical Corporation, also a subsidiary, to be applied to the redemption of its outstanding notes in that amount. The balance of the proceeds will be added to Merritt-Chapman's general funds and will be available for its general corporate purposes.

## Chemical Construction Ends Lawsuit With Texas Concern

The lawsuit between Texas City Chemicals, Inc., and Chemical Construction Corporation, a subsidiary of American Cyanamid Company, New York, has been settled to the satisfaction of both parties, it was announced last week by the two companies. The suit, filed in 1954, involved claims and counterclaims concerning contracts under which Chemical Construction Corporation was to design and construct for Texas City Chemicals, Inc., at Texas City, Tex., a dicalcium phosphate plant, a sulfuric acid plant, and facilities for the recovery of uranium from phosphate rock. According to the joint announcement, the plants are now in commercial production.

## Sharpe & Dohme Appoints

Dr. L. Paul Sinotte has been named manager of pharmaceutical control for Sharp & Dohme, Philadelphia, a division of Merck & Co. Dr. Sinotte joined the staff of Sharp & Dohme in 1954 as technical assistant in the quality control division. In his new post, Dr. Sinotte will supervise pharmaceutical analytical laboratories, formula, label and narcotic control, and checking and inspection.

## *ASTM Meeting Next Week*

*—Continued from page 7*

ern textile science in the 1940's and early 1950's.

Dr. Hamburger will discuss the newest technics and equipment employed in the analysis of textiles, mentioning the behavior of textiles in tension, compression, bending and torsion. He will also take up the effects of structural order upon the physical properties of fibers, the effects of fiber properties upon yarn behavior, the effects of geometry upon fabric behavior and the importance of these behavior caracteristics upon objective and subjective functional performance characteristics of textile structures.

Fritz V. Lenel, professor of metallurgical engineering at Rensselaer Polytechnic Institute, will present the fourth Gillett Memorial Lecture, entitled "Powder Metallurgy—Now (Newer Technics, Improved Properties, Wider Use)," during the afternoon of June 28. This lecture is sponsored jointly by the ASTM and Battelle Memorial Institute and commemorates Horace W. Gillett, the first director of Gillett.

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## Olin Given Extension On Aluminum Plant Write-Off

Olin Mathieson Chemical Corporation, New York, has obtained a year's extension of its certificate of necessity for construction of an aluminum plant in West Virginia, the Office of Defense Mobilization has reported. The company, it was said, contemplates spending $74,056,390 for facilities to produce 60,000 tons of primary aluminum a year.

ODM said the company, which in 1952 obtained the certificate entitling it to federal tax benefits on a $123,000,000 project, has revised its original plans. The certificate was at first issued for six months but has been repeatedly extended. The new action prolongs it to June 18, 1956, and revises the stated capacity downward from an original 110,000 tons.

## ACTH Makeup Learned, Synthetic Output Foreseen

The University of California announced last week that a research team there had determined the complete molecular structure of ACTH. The achievement, it was pointed out, kindles hope for the synthetic production of pituitary hormones and for their more precise use in medical science.

The architecture of ACTH was determined by a team headed by Dr. C. H. Li, professor of biochemistry. It was the result of a five-year project and cost about $250,000. Dr. Li, who also teaches experimental endocrinology, is credited with a leading part in the isolation, during a fifteen year period, of five of the six major pituitary hormones, including ACTH.

## Pittsburgh Coke Chooses Three Top-Level Officers

Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., has elected R. M. Marshall chairman of the board and Henry L. Hillman president. J. H. Hillman, jr., has become chairman of the finance committee.

Mr. Marshall, who joined the company in 1941 as executive vice-president, has been president since 1947. Henry Hillman has served with the company since 1941, except for a three year leave of absence for wartime service. He was elected a vice-president in 1950, and executive vice-president in 1952.

## Tariff Commissioner Okayed

The nomination of James Weldon Jones as a member of the Tariff Commission, submitted by President Eisenhower in March, last week was confirmed by the senate. Mr. Jones' appointment for the remainder of the six-year term expiring June 1, 1957, as a Democratic member of the commission, completes the bi-partison membership of six commissioners.

## Tetracycline Rules Amended

Several changes in regulations relating to certification of tetracycline hydrochloride tablets with nystatin were announced last week by the Food and Drug Administration. The expiration date for certification of the product was fixed by the agency at twenty-four months from date of certification.

## *Int'l Chemistry Group*

*—Continued from page 7*

be given by Prof. D. H. R. Barton of Birkbeck College, London, who will talk on "Some Recent Progress in Conformational Analysis." The second lecture in this section will be given by Prof. S. Winstein of the University of California at Los Angeles, who will discuss "Some Recent Aspects of Carbonium Ion Behavior."

A lecture entitled "The Chemistry of Heartwood Constituents of Conifers and Their Taxonomic Importance," presented by Prof. H. Erdtman of Kungl. Tekniska Hogskolan, Stockholm, will be the first in the natural products section. Prof. P. Pratesi of the University di Pavia will talk on "Natural Compounds as a Starting Point for the Synthesis of Drugs." Prof. R. B. Woodward of Harvard University, Cambridge, Mass., will discuss "The Total Synthesis of Strychnine." Prof. C. Fromageot of the Universite de Paris will also speak in this section.

The synthetic, industrial and analytical organic chemistry section will hear Prof. L. G. S. Brooker of Kodak Research Laboratories, Rochester, discuss "Recent Development in the Chemistry of Photographic Sensitizing Dyes." Also scheduled in this section are Prof. T. R. Seshadri of Delhi University, Delhi, who will talk on "Synthetic Attempts Following Possible Paths of Biosynthesis," and Prof. K. Ziegler of Max-Planck-Institut fuer Kohlenforschung, Mulheim, Germany, who will offer a talk on "Aluminum in Organic Chemistry."

The secretary general of the congress has received 600 abstracts of scientific papers. These papers have been grouped in the following categories:—Molecular structure, stereochemistry, reaction mechanism; amino-acids, peptides, proteins, alkaloids and carbohydrates; aliphatic, alicyclic, aromatic and heterocyclic compounds, including terpenes and steroids; dyestuffs, high polymers and other synthetic organic compounds.

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## *For the Bookshelf*

THE CHEMICAL INDUSTRY IN EUROPE. Compiled by the Organization for European Economic Co-operation. Paper; 144 pages, 6 x 9½ in. Available from the Organization for European Economic Cooperation Mission, Publication Office, 2002 P Street, N. W., Washington 6, D. C. $1.50.

This volume gives detailed market information on chemicals produced in European countries. Opening with a discussion of the overall market situation, it deals with general features of the market, developments, international trade and related factors. It then presents the chemical market situation as it exists in some sixteen countries, and follows this with more particular information about the chemical industry in Europe as it affects inorganic, organic and coaltar chemical products. Imports and exports are dealt with for each class of chemicals, presenting figures for recent years.

---

THE BASIS AND DEVELOPMENT OF FAIR TRADE—Third edition, National Wholesale Druggist's Association, New York. Paper; 170 pages, 6x9 inches.

This volume is a compilation, or compendium, of the law and practice of fair trade, as it operates in forty-five of the forty-eight states and in Puerto Rico and Hawaii. It includes an interpretative analysis of court decisions on fair trade laws relating to fair distribution, and samples are given. Models of fair trade contracts for use under the fair trade laws are illustrated.

The book discusses fair trade laws from the standpoint of their validity and justification, their operation and enforcement, their essential features and embellishments, and presents a correlation of various state fair trade acts.

---

MECHANICAL MOLDED GOODS—By D. C. Thompson. Cloth; 154 pages, 6 x 9 inches. Wilmington, Del.; Elastomers Division E. I. duPont de Nemours Co.

This volume deals specifically with the molding, compounding, and finishing of "Neoprene" and "Hypalon" rubbers, along the lines of various molding methods. Virtually every detail of the methods, processes, and technics is thoroughly covered and written about in an understandable way which will be of very considerable help to the new technologist in the rubber industry.

---

TARIFFS: THE CASE FOR PROTECTION. By Lewis E. Lloyd. Cloth; 205 pages, 5½ x 8 inches. New York: Devin-Adair Company. $3.50.

The author of this book was originally a "free trader," but in spending two years on research work for this book, has changed his own convictions, and here presents the case for protection via tariffs. The tariff issue is outlined from its origins in 1791. The effects of tariffs as they relate to wages, production, technological progress and national defense are discussed in detail.

The burden of this book is to show that free trade can be successful only in theory, and cannot be successful in the real economic world of independent sovereign nations. It also contains some interesting tabulated statistical data.

---

THE CHEMICAL INDUSTRY FACTS BOOK Second edition. Paper; 148 pages, 6x9 in. Washington: Manufacturing Chemists Association. $1.

This is the story of the chemical industry in the United States in progress and in services. It is told in a manner which should get from the general public, as well as from the many industries dependent upon chemicals as materials, a clear recognition of how the chemical industry has risen to basic industrial rank—and why. It sets forth the research, development, productive, and distributive operations by means of which the industry utilizes the resources of natural raw materials, provides a wide variety of employment at all levels of ability, fits its plants into the industrial communities, finances its operations, and provides essential materials for the furtherance of all the endeavors of mankind.

Especially of interest in a sense of public relations, is the section devoted to chemicals in everyday life—encompassing health, crops, clothing, defense, and other needs. What this section tells, all thinking persons should know. The adequate dissemination of that knowledge would contribute most heavily and helpfully to the general economic welfare and stability. The story also tells how the Manufacturing Chemists Association functions and provides a directory of other organizations in the industry and a catalog of informative reading.

This is a book which should be among the texts in every school.

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# Essential Oils, Aromatics, Flavorings

The essential oils market displayed considerable price activity last week. There were a number of price changes, all downward. The trend toward lower prices was not too surprising in view of the high price levels to which many oils have advanced in recent months under the impetus of supply shortages and threats of war in the Far East which could shut off essential oil production sources. Brazilian bois de rose oil prices were reduced 10 cents per pound in the first decline in that item since an initial advance earlier this year. South American petitgrain was off 30 cents, reflecting the low level of demand which characterized this market in recent months. The mint oils were lower, as dealers began to anticipate new crop offerings. Both peppermint and spearmint oils were reduced, the former 25 cents, and the latter, 15 cents per pound. Artificial sassafras oil mirrored the recent decline in ocotea cymbarum prices declining 5 cents per pound last week while lemongrass oil appeared to be on the verge of an expected downturn, and dropped 25 cents, on spot.

Heavy competition in the trade was behind a 10 cent cut in clove oil, USP, in addition to smaller demand. A number of less important oils, volumewise, were lower last week. Tansy oil was reduced 25 cents, Spanish neroli, $2.50 per pound and cubeb and garlic oils, both 25 cents. As a result of a decline in overall market prices, consumption was expected to be encouraged. Whether consumers will build up their inventories or continue buying on a hand-to-mouth basis could not be accurately determined at this time, however.

The seeds and spices market was seasonally slow last week with one very notable exception. Jamaica pimento advanced 21 cents in the course of the week, a substantial price increase, while Mexican pimento was upped 10 cents per pound. Offerings of pimento from origin have been very few in recent months and new crop pimento was not expected to arrive here until September at the earliest. Meanwhile, consumer and dealer inventories were quite low and Europe was reported buying heavily at origin to the ultimate detriment to consumers here. Nutmeg and mace prices were both higher in view of the small stocks on hand and the lack of offerings while Spanish anise and Indian celery seed were both lower.

### *Price Trends*

**Advanced**

Coriander seed, Roumanian, ½c. per lb.
Ginger, African, 1c. per lb.
Mace, East Indian, siftings, 3c. per lb.
Nutmeg, East Indian, 3c. per lb.
West Indian, 2c. per lb.
Pimento, Jamaican, 16c. per lb.
Mexico, 10c. per lb.

**Reduced**

Anise, Spanish, 1c. per lb.
Celery seed, French, 1c. per lb.
Indian, ½c. per lb.
Oil, bois de rose, 10c. per lb.
Clove, USP, 10c. per lb.
Cubeb, 25c. per lb.
Garlic, 25c. per lb.
Lemongrass, 25c. per lb.
Neroli, Spanish, $2.50 per lb.
Peppermint, 25c. per lb.
Petitgrain, 30c. per lb.
Sassafras, art., 5c. per lb.
Spearmint, 15c. per lb.
Tansy, 25c. per lb.
Vanilla beans, Bourbon, 25c. per lb.

**Comparative Price Indexes**

(100 — 1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 135.89 | 136.13 | 136.22 | 137.56 |

*(For Current Prices see Page 9)*

## Essential Oils

**Bois de Rose**—The spot market declined 10c. per pound last week in face of consumer resistance to current prices. The new minimum quotation was $4.70 per pound and in line with the reduction in the oil, some of its derivatives were also lowered, it was noted. Supplies, on spot, were adequate and expected to continue.

**Camphor**—The spot market tended toward weakness although minimum price levels held unchanged last week. There was some possibility of lower prices in the future in view of the slackness in consumer demand, at present. Camphor sassafrassy oil ranged from 40c. to 60c. per pound last week while white oil was quoted at 35c. to 50c., depending upon quantity and sellers' ideas. Camphor 1.070 was easy, ranging from 90c. to $1.20.

**Cedarwood**—The market continued soft with buying mostly hand-to-mouth. Supplies were adequate to cover current needs and expected to continue in the immediate future.

**Chenopodium, NF** — Consumer inquiry was currently about normal for this time of year. Supplies were adequate and spot quotations have taken a downward turn in recent weeks, although they held steady last week.

**Citronella**—Prices in this market continued to see-saw last week as they have during the past three months. The net result was that prices currently approximated those in force last March when the market hit its peak, disturbed as it was by reports of an imminent invasion of Formosa and the subsequent initiation of hostilities in that area. Currently, consumer interest appeared to be confined to buying for immediate needs. The war scare has past and inventories built up earlier this year were believed to be shrinking to the point where replacements will be necessary.

Currently the spot market appeared to be slightly weaker than formerly although this situation could instantly change if new evidence of hostilities were to erupt over Formosa. Such a possibility would be, of course, potentially a source of great disturbance to market values.

**Clove** — Increased competition in the trade rather than any lowering of sellers' quotations from origin, were responsible for a 10c. decline in clove oil, USP, last week. The current market ranged from $3.15 to $4 per pound. The current price of cloves was not believed to justify the decline in clove oil prices, according to trade sources. Demand, however, has been slow, thus accounting for current price levels.

**Cubeb**—The spot market declined 25c. per pound last week. Current prices ranged from $4.25 to $6.25 per pound. Supplies were ample for current needs.

**Garlic**—Spot quotations were off 25c. last week. The new price range was from $6.25 to $9.50 per ounce.

**Geranium**—The market was steady last week. Despite predictions of a short crop, a lack of consumer enthusiasm has helped to hold the market down, in the opinion of some traders. The price differential between the Bourbon and the Algerian, varieties, normally as much as $2, has shrunk to 25c. per pound, at present.

**Lemongrass**—The spot market, after several weeks of relative stability, pricewise, began to slip last week and declined 25c. to a low of $1.75 per pound. Some trade observers have felt that current levels were higher than warranted and consumer buying has fallen off in face of sustained high levels.

**Lime**—Although demand has increased seasonally, low priced oil is still to be had in abundance, according to a market survey. The current low of $3.30 per pound represents a low in lime oil prices in recent years.

**Neroli** — Spanish neroli prices were quoted $2.50 per pound lower last week. The current range on this oil was from $32.50 to $85 per pound.

**Ocotea Cymbarum**—The spot market continued to exhibit some weakness last week. The recent decline in ocotea has been reflected in a lowering of artificial sassafras (camphor 1.070) prices.

**Orange**—The spot market remains weak. Prices, however, were not expected to go much lower, if they do decline at all. Shipping prices on French Guinea and West Indian varieties were noted to have declined in face of the depressed market in domestic types. Supplies of orange oil were more than ample and expected to continue.

**Peppermint**—The spot market declined 25c. per pound on both the natural and redistilled, USP, peppermint oils. The imminent approach of the new crop was credited with causing the downturn in addition to consumer reluctance to buy in quantities greater than needed immediately. Natural peppermint prices ranged from $7.25 to $8.25 per pound. While redistilled, USP, oil ranged from $7.60 to $8.50.

**Petitgrain**—The spot market dropped off 30c. per pound last week in face of consumer lassitude in recent months. The current price level ranged from $3.50 to $4.80 per pound.

**Sassafras**—Artificial sassafras (camphor 1.070) prices declined 5c. per pound in conjunction with a recent decline in ocotea cymbarum quotations. The current

*For Late Market Developments, See Page 4*

### *Baird Aromatics Head*

Edward A. Bush has been appointed head of the newly-established aromatics department of Baird Chemical Corporation, New York. Mr. Bush was formerly sales manager of the aromatics division of Rhodia, Inc., and prior to that was in the sales department of Dow Chemical Company.

range was from 90c. to $1.40 per pound.

**Spearmint**—Spearmint oil prices declined 15c., on spot, in line with the fall in peppermint oil quotations. The current price range was $4.10-$5.20.

**Tansy**—Spot quotations were reduced 25c. per pound last week, bringing the current range to $7.50-$8.40 per pound.

## Miscellaneous

**Anise Seed**—Spanish anise seed declined 1c. per pound last week and was currently quoted at 34c. Mexican anise was steady at 32c. per pound.

**Celery Seed**—Sluggishness of demand was reflected in some easing in spot prices last week. The market abroad was noted to be holding steady, nevertheless. The current market was 37c. on French celery seed and 16c. on Indian quality seed. The former was 1c. lower than the week previous and the latter, ½c.

**Coriander Seed**—Roumanian coriander seed advanced ½c. on spot while other qualities held unchanged. Roumanian seed was currently quoted at 7c. per pound.

**Fenugreek Seed**—The spot market remained unchanged and firm. Supplies were ample to cover current needs while prices ranged from 9c. to 9½c. on Moroccan seed.

**Ginger**—Sierra Leone ginger root advanced 1c., on spot, in face of renewed buying interest. The current market was 37c. per pound. Jamaica ginger was unchanged on spot while report from origin indicated a very firm market there. Offerings of Jamaica root have been scarce in recent months and it was expected that the market would probably advance in the future. Jamaica No. 2 ginger was currently quoted at 45c., on spot, while No. 3 was priced 1c. lower.

**Mace**—Siauw siftings advanced last week in line with higher shipment prices from origin and the virtual lack of whole East Indian mace. The spot market ranged from $1.38 to $1.50 per pound on siftings with the No. 1 grade at the higher end of the range.

**Nutmeg**—Whole East Indian nutmeg advanced 3c. on spot, last week, and was currently quoted at 45c. There was some reconditioned East Indian quality heard at 43c. West Indian nutmeg prices advanced 2c. in line with the higher levels in East Indian quality. The current price was 38c.-39c. for this quality.

**Pepper**—Recent arrivals provided an ample supply of ready pepper. They did not, however, depress spot levels more than fractionally because the better part of the pepper was already committed. It was distributed throughout the country rather than being pressed here for sale. Origin markets held very well and there were few opportunities to replace spot business with shipments at a discount. The price of July and even August delivery of Malabar/Lampong is held very close to spot levels, it was noted.

Demand for spot white pepper and nearbys firmed local levels and offerings through July delivery are very light. The better part of arrivals in prospect through July 15th have been sold. Steamers arriving during the second half of July are more freely offered but prices are very steady.

**Pimento**—This item was by far the star performer in the spot market last week. Prices jumped 16c. on Jamaica quality and 10c. on the Mexican material. It was understood that Europe has been a heavy buyer and that the market at origin has become very firm. There have been predictions made from time to time in the past that the pimento market would advance again but the extent of the increase this past week was phenomenal and gave excellent manifestation of the condition of dealer stocks here. New crop shipments are not expected here until September and there was a feeling that the market here would continue to rise in the interim.

**Vanilla Beans**—The market was quiet again last week as consumers continued to buy strictly hand-to-mouth. It could not be predicted with certainty as to when the status quo might change but based on trade estimates of low inventories, it did not appear likely that the large users of vanilla could continue to operate on a short range basis for much longer. There was a theory that buying potential was quite large and if a large consumer were to come into the market, prices would probably advance. This was patent in view of the fact that there have been no offers from origin and the market there was reportedly very firm in its ideas.

The spot market was down to a low of $7.75 per pound on Bourbon beans last week, 25c. lower than the preceding week. Other vanilla varieties held unchanged.

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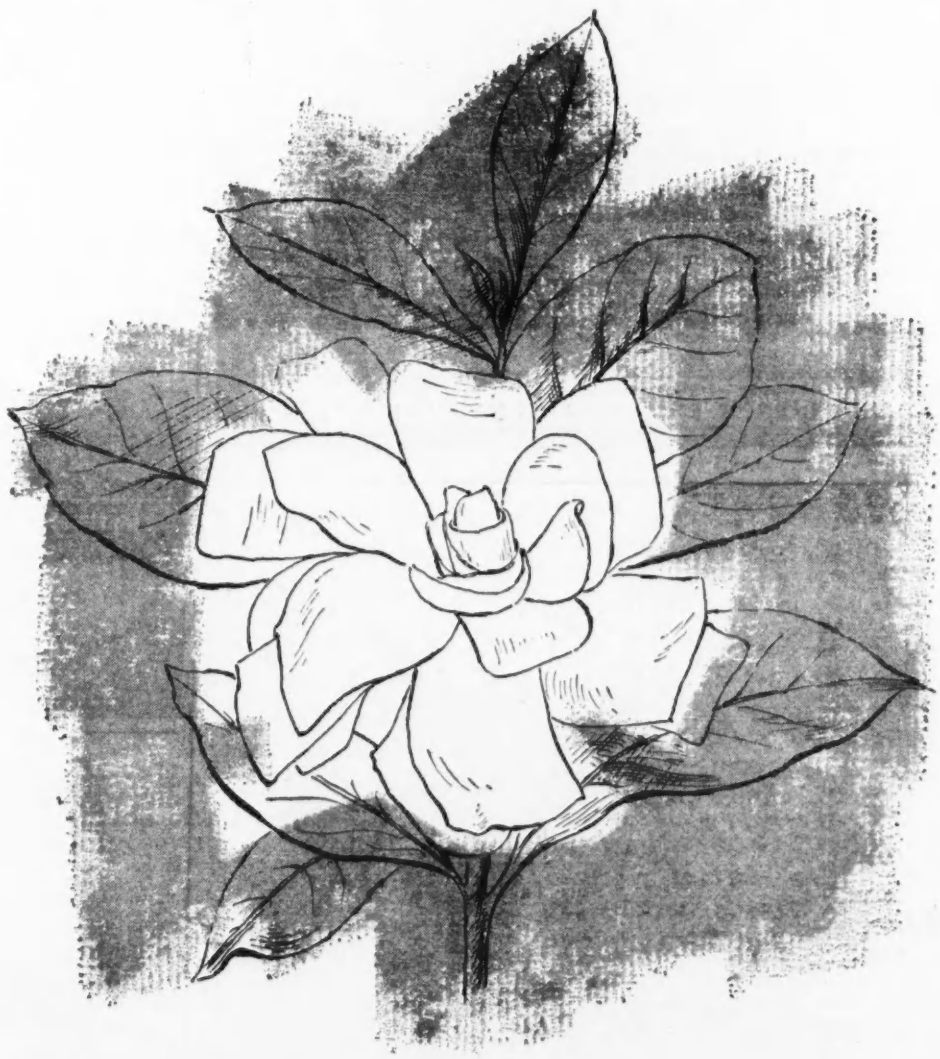

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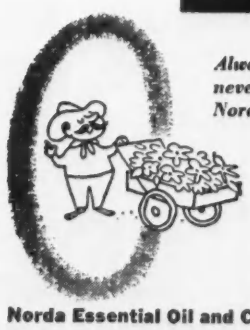

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## DuPont Kinetic Division Reports Two Promotions

William F. Kelly has been assigned to the New York district office of the E. I. duPont de Nemours & Co. as sales correspondent, a new position created for that area's customers for "Freon" fluorinated hydrocarbon refrigerants and aerosol propellents.

Succeeding Mr. Kelly as sales correspondent for refrigerant sales to equipment manufacturers is Richard D. Goss, whose office will be located in Wilmington, Del. Mr. Kelly joined duPont as a bookkeeper in 1939. He has been associated with the company's "Kinetic" chemicals division as a clerical and order supervisor since 1950. Mr. Goss joined duPont in 1941 as a clerk at its Chambers Works plant at Deepwater, N. J., worked on the government's Manhattan Project there during the war, and since 1950 has been attached to the cost control section of the organic chemicals department in Wilmington.

## Premium Chemicals Formed For Research, Manufacturing

Premium Chemicals, Inc., has been organized as a research, manufacturing and distributing company, with Guy J. Riccardi as president. Its offices are at 170 Broadway, New York. Its research laboratory and manufacturing plant, for the production of bulk pharmaceuticals, fine chemicals, and industrial organics, are located in Farmingdale, New York. Facilities are also available for the custom synthesis of fine organic chemicals.

### *Trade Briefs*

**Dodge & Olcott, Inc.,** New York, has developed a perfume speciality named "Convallary's."

**Colgate-Palmolive Company,** Jersey City, N. J., has promoted Philip G. Schlageter to merchandising brand manager in its soap sales department.


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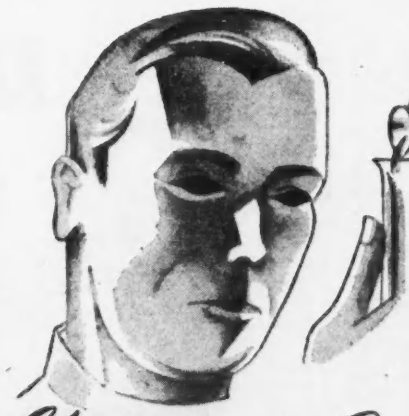

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# Protective Coatings Materials

Phenolic resin prices were advanced by a major producer, in response to the rise in phenol and formaldehyde. Other synthetic resin materials were steady in price. Alkyds presented a healthy aspect, with production moving well into consuming channels. Demand was not at levels that strained present producing capacity, but there was a reasonable balance between supplies and the market's needs. The market for urea-formaldehydes in the area of adhesive bonding uses could stand some improvement, where the effects of intense competition could be seen.

Price advances for zinc oxides, which were initiated earlier, appeared in the market price box for last week because one major producer made its advances effective June 15. The strong tone in the metal, together with higher production costs, were responsible for the firmer level in these pigments. Zinc dust went up ½ cent per pound as a direct result of a similar advance in the metal. Other pigments were steady and unchanged over the week. Demand was rated as exceptionally good and was not confined to the paint industry alone. Lead pigments moved in steady volume, with no sign of any slackening in consumption noticeable yet. Red copper oxide demand was rated as satisfactory, and black as quite good. A fairly close supply situation prevailed for titanium dioxide, and although consumer demands were being met, some delays in deliveries were nonetheless encountered.

The shellac market was steady, with no excitement and little change apparent. A fairly good demand, plus a firm attitude on the part of holders in Calcutta, combined to prevent any big sag in prices. Dealers in this country were still hopeful of lower prices, but felt that reductions could be effected only very gradually. Casein was firm and moved in routine quantities to consuming mills. The Argentine was still without competition from France.

### *Price Trends*

**Advanced**

Zinc dust, ½c. per lb.
Oxide, pigment, American process, lead-free, ½c. per lb.
leaded, 35%, ½c. per lb.
50%, ¼c. per lb.

**Reduced**

None

**Comparative Price Indexes**

(100—1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| **97.18** | **97.16** | **97.16** | **96.59** |

(*For Current Prices see Page 9*)

## Prime Pigments

**Aluminum Paste, Powder**—Shipments of atomized and grained aluminum powder during April amounted to 1,354,000 pounds, as compared with 1,872,000 during March, it was reported by the Census Bureau. Flaked powder shipments in April came to 344,000 pounds, up from the 301,000 reported for the previous month. Aluminum paste shipments in April totaled 1,096,000 pounds, slightly above the 1,093,000 pounds shipped during March.

**Antimony Pigments** — Consumption of precipitated antimony sulfide during the first quarter of the year came to 9 short tons, and to 37 short tons during the whole of 1954, it was reported by the Bureau of Mines. Consumption in frits and ceramic enamels was reported at 240 short tons during the first quarter of 1955 and at 706 during 1954. Paints and lacquers took 26 short tons in the first quarter of the year and 681 tons in 1954. Pigments accounted for 192 short tons in the first quarter of 1954, and 700 during the whole of the previous year. Plastics uses accounted for 149 short tons in the quarter and 620 short tons in 1954.

**Carbon Black**—Daily average production and shipments of carbon black were 21 percent higher in April than in the same month of 1954, according to the Bureau of Mines. Production in April was 5 percent higher than in March, 1955, while shipments were nearly unchanged. Exports of carbon black in the first quarter of 1955 were 26 percent higher than a year ago.

The following figures, in thousands of pounds, indicate production, shipments, stocks, and exports of carbon black for April, 1955, with figures for March, 1955, and April, 1954, reported for comparison.

**Production**

| | Furnace | Contact | Total |
|---|---|---|---|
| April, 1955 | 113,479 | 31,676 | 145,155 |
| March, 1955 | 112,206 | 30,750 | 142,956 |
| April, 1954 | 88,198 | 31,802 | 120,000 |

**Shipments**

| | Furnace | Contact | Total |
|---|---|---|---|
| April, 1955 | 116,839 | 39,827 | 156,666 |
| March, 1955 | 119,438 | 42,107 | 161,545 |
| April, 1954 | 93,874 | 36,184 | 130,058 |

**Stocks**

| | Furnace | Contact | Total |
|---|---|---|---|
| April, 1955 | 110,572 | 145,029 | 255,601 |
| March, 1955 | 113,932 | 153,180 | 267,112 |
| April, 1954 | 157,644 | 226,895 | 384,539 |

**Exports**

| | Furnace | Contact | Total |
|---|---|---|---|
| April, 1955 | * | * | * |
| March, 1955 | 23,392 | 19,083 | 42,475 |
| April, 1954 | 15,850 | 17,840 | 33,690 |

*Not available.

**Chrome Colors**—Material moved well in a strong market, according to producers. Optimistic reports were heard about sales for the second quarters, based on the fact that demand from all interested consumers was good. Prices remained steady, with no indication that any changes were in the making.

**Copper Oxides**—Demand was rated as quite good for the black and as satisfactory for the red material by informed sources in the industry. Prices have remained quite steady over the past weeks, with an underlying feeling of strength deriving from the firm position of the metal.

**Lead Pigments**—Demand for lead pigments kept up a steady volume from all directions, it was reported. The paint industry came in for a good volume of orders, but was not alone in its interest in lead pigments, as all users maintained an active interest. Although some slackening was expected later in the summer during the period of vacation slowdown, no significant decline in sales was expected before then. Prices were held at their current levels without change, and were considered quite firm.

**Titanium Dioxide** — Current consumer demands are being met, it was reported by manufacturers, but some delays in deliveries have been necessitated by the high level of inquiry. All consumers are quite active in this market at the present time, it was stated. Manufacturers are accordingly operating at full capacity on titanium pigments and have thus far prevented any actual pinch from developing. A continued closely balanced market situation was expected over the immediate future, because consumption was expected to hold steady rather than to rise sharply during the coming thirty to sixty days.

**Zinc Oxides**—Quotations for lead-free material reached a level of 14 cents per pound in carlots and 15 cents in l.c.l. shipments. Thirty-five percent leaded material reached a level of 14⅝ cents in carlots, while the 50 percent leaded grade was quoted at 14⅞ cents. While most suppliers had raised their listings earlier, one major producer made its increases effective June 15. Zinc dust went up ½c. per pound in direct response to a similar rise in the metal.

## Synthetic Resins

**Alkyds** — This market presented a healthy aspect, with production moving well into consuming channels. Demand was not at levels that strained present producing capacity, it was pointed out in the industry, but there was at least a reasonable balance between supplies and the

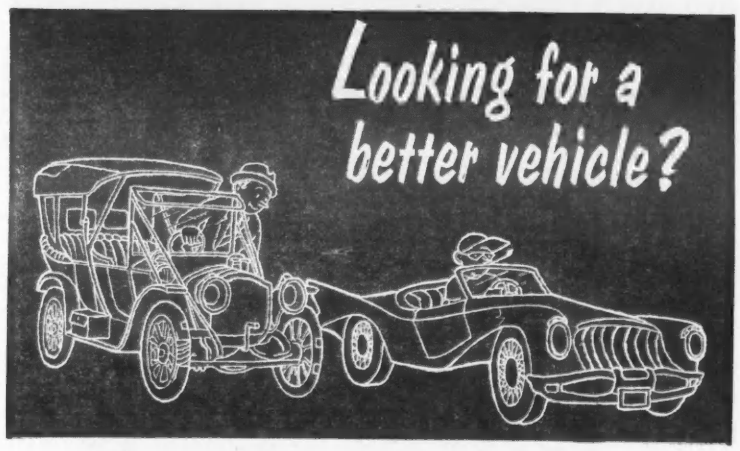
## *Protective Coatings Shipments, Output: April*

| | Factory shipments—Dollars | | †Reported production—Gallons | |
|---|---|---|---|---|
| | April | *March | April | *March |
| Trades sales products: paint, varnish and lacquer | $81,888,000 | $78,630,000 | 21,620,000 | 21,602,000 |
| Industrial sales products, total | 53,201,000 | 53,818,000 | 20,055,000 | 20,983,000 |
| Paint and varnish | 39,495,000 | 39,680,000 | 14,994,000 | 15,544,000 |
| Lacquer | 13,706,000 | 14,138,000 | 5,061,000 | 5,439,000 |
| Totals | $135,089,000 | $132,448,000 | 42,490,000 | 43,433,000 |

Total sales, January through April:—$482,219,000.

† Detail does not add to total because some respondents reported only total production which was not allocated either to trade or industrial sales products.
* Revised.

*For Late Market Developments, See Page 4*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| Gallons | Pounds | | |
|---|---|---|---|
| | 100 | R-11 NEVILLE RESIN | |
| 40 | 324 | OKO Linseed Oil, M2.5 | |
| 11.5 | 84 | 2-50-W HI-FLASH SOLVENT | |
| 53 | 340 | Mineral Spirits | |
| | 2.7 | 6% Cobalt Naphthenate | |
| 114 | 850.7 | | |

VEHICLE CONSTANTS

| | |
|---|---|
| Solids | 50% |
| Viscosity (Gardner) | B-C |
| Color (Gardner) | 12-14 |
| Acid Number (on solids) | 3 Maximum |
| Set-to-touch | 3-4 Hours |
| Dry | 18 Hours |

Method of Preparation: Melt and mix together R-11 Neville Resin and OKO Linseed Oil at 350°F. Reduce and add drier.

*You get all the extras—acid, water, alkali resistance with outstanding leafing and durability.

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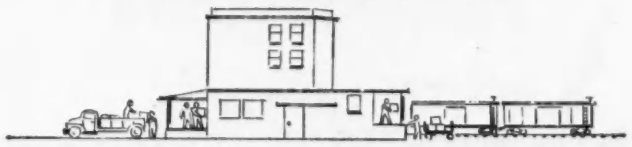

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Los Angeles, California
Louisville, Kentucky
New Orleans, Louisiana
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Pittsburgh, Pennsylvania
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Grant Chemical Co. Boston, Mass.
R. L. Kelley Danbury, Conn.
J. A. Castro Havana, Cuba
J. H. Hinz Company Cleveland 13, Ohio
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market's needs. Soybean oil remained firm and steady.

**Maleics**—Demand has been steady and of a fairly routine nature from most consumers. Prices were unchanged by major producers over the past week, with no alterations expected in the immediate future.

**Phenolics**—One major producer announced a price rise for its line of phenolic resins last week, with the increases effected immediately for non-contract orders and July 1 on contract orders. Cited as bringing about the increases were the advances in phenol and formaldehyde. The amount of the advances varied with the grade and physical form of the resin involved, it was stated. Demand for phenolics has been reported good from almost all directions.

**Urea-Formaldehydes**—In the area of adhesive bonding uses, the market could stand some improvement, it was stated in the industry. In this area, the market appeared depressed to some because of competition, it was mentioned.

## Lacquer Materials

**Citrated Plasticizers**—The sales outlook for citrated plasticizers appeared good, particularly since the full potential of the market was believed not to have been explored as yet. Some recent product improvements have broadened the potential market for these materials, it was stated, since there are numerous specialty lines that have not yet been pursued. Prices were stable and were not expected to shift in the immediate future.

**Dioctyl Phthalate**—Supplies of DOP just about equalled the market's current needs, with the result that most makers were not building inventories at the present. This situation derived from the fact that demand has been very good in most consuming industries, while production has felt the shortage of phthalic anhydride. Prices made no changes over the past week, and were considered quite firm at present levels.

## Fillers and Inerts

**Bentonite**—Sales have held a good pace throughout the quarter, it was stated in the industry. The paint trade has come in for a sizable volume of material. At the same time, demand has not exceeded productive capacity at the present, and there appeared to be a reasonably comfortable supply level. Prices were steady and unchanged.

**Fuller's Earth**—Material was reported moving to the satisfaction of most of those involved in this market. Most grades were in ample supply, it was stated, and there appeared to be no difficulty in meeting shipping schedules.

**Rottenstone**—A fair volume of inquiry was encountered for this material, it was reported in the trade. Consumer requirements were expected to remain fairly stable over the coming weeks, since the summer usually produces no sizeable slackening of demand, it was noted. Prices were unchanged from earlier quotations.

## Natural Resins

**Copal, Dammar Gums**—Prices withstood pressure to move in either direction and remained steady at earlier levels. Demand was rated as fairly good from almost all consuming outlets, and supplies were generally adequate for these needs. Price changes over the coming weeks were expected to be only moderate in size.

**Shellac**—The market was fairly steady throughout the week, with no excitement and little change. Dealers in this country were still hopeful of lower prices, but were hesitant to make any predictions as to when they might be expected. The chief sources of the underlying strength in this market were reported to be the fairly steady consuming demand encountered in this country, plus the desire on the part of Indian principals to obtain the highest prices feasible for their material. In view of this situation, observers here could see no probability of drastic price changes in the immediate future.

## Miscellaneous

**Casein**—Normal demand was encountered in a market that continued to be dominated by Argentine offerings. Prices were quoted in the range of 23¼c. to 23½c. per pound on a duty-paid basis for carlot purchases. New Zealand offerings ranged between 25c. and 25½c. per pound on the same basis. Consumers were reported offering some price resistance, but trade sources stated that there was little likelihood of easier quotations in the immediate future.

## Naval Stores

**Rosin, Gum**

(USDA, per 100 lbs.)

| | Fri. June 10 | Mon. June 13 | Tues. June 14 | Wed. June 15 | Thur. June 16 |
|---|---|---|---|---|---|
| Drums— | | | | | |
| K | ... | ... | $8.05 | $8.00 | ... |
| M | ... | ... | 8.00$ | 8.00 | 7.995$ |
| N | ... | ... | 8.32$ | 8.20$ | 8.00 |
| WG | $8.00 | $8.02 | 7.99$ | ... | ... |
| WW | ... | 8.33 | 8.15 | 8.15 | 8.15 |
| Bags— | | | | | |
| G | 7.85 | ... | ... | ... | ... |
| K | 7.80 | ... | ... | 7.85 | ... |
| M | 7.90$ | ... | 7.82 | ... | ... |
| N | 7.80 | 7.91 | ... | 7.90 | 7.83 |
| WG | 7.91$ | ... | ... | ... | 7.88 |
| WW | 8.02$ | ... | ... | 8.00 | 7.98 |

Tankcars (for week ended June 10)—M, $7.68½; N, $7.72; WG, $7.75.

Sales, USDA

| 654* | 411* | 739* | 540* | 776* |
|---|---|---|---|---|

New York
(per 100 lbs., c.l., Friday)
B through N, $9.00; WG, $9.05; WW, $9.15.

**Turpentine, Gum**

(USDA, per gal., 7.2 lbs.)

| | | | | | |
|---|---|---|---|---|---|
| Price | .545 | .544$ | .546$ | .543$ | ... |
| Sales | 8.000¶ | 14.000¶ | 14.000¶ | 18.000¶ | ... |

New York, Friday, per gal. 7 lbs., tankcars, 62½c., l.c.l. 74c.

*Drums equivalent. $Average price. ¶Gallons.

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## Atkinson, Pfizer Purchasing Agent, Honored at Dinner

William W. Atkinson, purchasing agent of Chas. Pfizer & Co., Brooklyn, N. Y., was honored last week at a dinner held in the Granada hotel, Brooklyn. Mr. Atkinson has been associated with Pfizer since 1906. Retiring as head of Pfizer's purchasing department, he will remain with the company in an advisory capacity until the end of the year.

At the dinner, Mr. Atkinson was presented with a grandfather's clock, an engraved plaque carrying his dates of service with the company, and a specially reprinted front page from a 1906 issue of OIL, PAINT AND DRUG REPORTER. Making the presentations were John J. Powers, sr., retired vice-president of Pfizer; John E. McKeen, president; Frank D'Antonio, assistant purchasing agent, and George A. Anderson, former president and chairman of the board of Pfizer.

## FTC Hits Food Group On Competition Charge

The National Food Brokers Association and its 1,750 members last week were charged by the Federal Trade Commission with conspiring to eliminate competition in their industry.

The complaint charged as illegal an alleged plan to prohibit members of the association from soliciting the account of a seller or principal already represented by another member. The commission's complaint said that this has "a dangerous tendency . . . to hinder and restrain competition."

## Obituaries

### Charles W. Griffin

Charles W. Griffin, president and co-founder of Colonial Works, New York, died on June 11 in that city. He was eighty-five years old. Together with William H. Whitney, jr., a fellow employee at the former King Paint Company, Brooklyn, N. Y., Mr. Griffin founded Colonial Works in 1897. He originally gave most of his time to the development of sales in the field, but in 1904 shifted to the home office. In later years he returned to field sales work. In 1927 he was elected president of Colonial Works, a position he held until his death.

### Robert E. Larendon

Robert E. Larendon, a partner in the former M. W. Larendon & Co., died on June 10 at Quogue, N. Y. He was eighty-two years old. M. W. Larendon & Co., founded by Mr. Larendon's father, was reorganized into a partnership when Mr. Larendon and his brother entered the business. The company dealt in rosin and turpentine in the New York market for over sixty years.

### Glen A. Spaulding

Glen A. Spaulding, director of trade sales for Spencer Kellogg & Sons, Buffalo, N. Y., died June 3 in that city. He was fifty-seven years old.

Mr. Spaulding joined Spencer Kellogg in 1938 as a trade sales specialist in the linseed oil division. During World War II he accepted an appointment as assistant chief of industrial oils, fats and oils division of the War Foods Administration. In 1944 he returned to Spencer Kellogg as a district sales manager, and in 1950 he was advanced to the post of director of trade sales, a position he held until his death.

**Dr. I. Arthur Anson,** vice-president in charge of manufacturing of Bell Oil & Gas Company, and president of Ben Franklin Refining Company, both of Tulsa, Okla., died on June 10 in Tulsa. He was sixty-seven years old.

**Gerald Nudell Bates,** sales manager and treasurer of Canadian Titanium Pigments, a subsidiary of National Lead Company, New York, died June 3. He was forty-four years old.

**Edmond J. Dozois, jr.,** research physicist at Chatham Electronics Corporation, Livingston, N. J., died on June 8 in Newark, N. J.

**Frank D. Green,** retired vice president of Armour & Co., Chicago, died on June 13 in Harrisburg, Pa. His age was sixty-four.

**Louis H. Kohler,** former office manager for Adam Cook & Sons, Linden, N. J., died June 12 in Cranford, N. J. His age was seventy-one.

**John H. Link,** head of the fire prevention division of American Cyanamid Company, New York, for twenty-five years, died on June 10 in Elizabeth, N. J. He was ninety years old.

**Joseph P. Mack, 2nd,** part owner of Mack Paving & Construction Company, died June 11 in Bucks County, Pa. He was seventy years old. Mr. Mack had been instrumental in the development of asphalt and oil resources in Trinidad and Venezuela. His age was seventy.

**Morris Hill Merritt,** secretary and purchasing agent of the Philadelphia branch of National Lead Company, died June 12 in Philadelphia. His age was sixty-three.

**Bernhardt Nelson,** a chemist formerly with Gilbert Spruance Company, Philadelphia, died June 16 in Rahway, N. J. He was seventy-nine years old.

**Allen V. Riley,** technical sales representative in the Houston, Tex., areas for Atlas Powder Company, Wilmington, Del., died June 10. He had joined Atlas in 1948, and had been with sales since 1951.

**Frank Tritschler,** a chemist and factory manager for Merck & Co., Rahway, N. J., died June 15. He was fifty-six years old.

**Stanley Williamson,** retired attorney for Union Carbide & Carbon Chemical Corporation, New York, died June 13 in Dobbs Ferry, N. Y. He was seventy-six years old.

**Alfred M. Wolf,** a director of Helena Rubinstein, Inc., died June 12 in New York. He was seventy-six years old.

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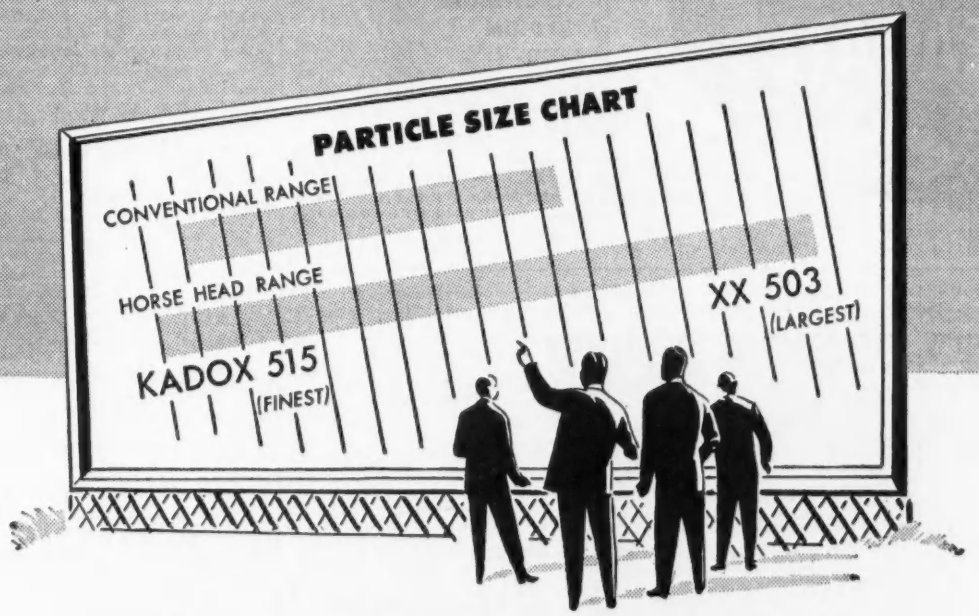


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SPECIFICATIONS: (Resublimed). COLOR, white; SUBLIMATION min. 99% granular or lump, 98½% powder; WATER INSOLUBLE, none; HEAVY METALS, none; IRON CONTENT max. 0.01%. (Sublimed). COLOR, light yellow to gray; SUBLIMATION min. 98% granular or lump, 97.5% powder; WATER INSOLUBLE max. 1.0%; HEAVY METALS, none; IRON CONTENT max. 0.05%.
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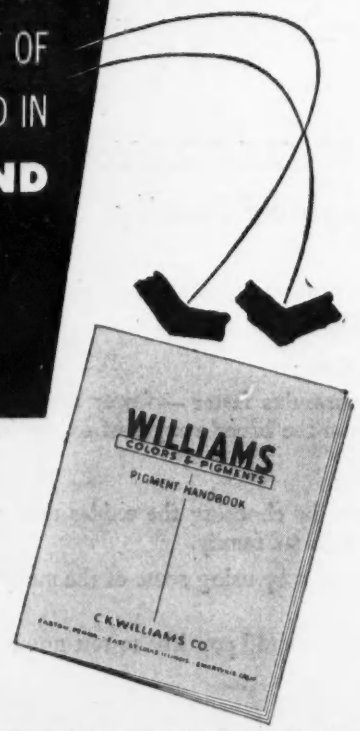


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## Amsco, Western, Names J.A. Bartlett New President

American Mineral Spirits Company, Western, has announced the resignation of its president, M. A. Williams who, according to a previous announcement, had been planning to retire. J. A. Bartlett, vice-president of Amsco in New York, and a director of American Mineral Spirits Company, Western, was elected president. He will assume active duties September 1 and will continue to retain his positions as vice-president and director of Amsco. A. J. Falkenberg and Ethan B. Higgins have been elected vice-presidents.

Mr. Bartlett has been with the American Mineral Spirits since 1943, when his father and Amsco entered the oil refining business in Miranda City, Tex. From 1934 to 1949 Mr. Bartlett served in various manufacturing and technical capacities in Amsco's refineries at Miranda City and Corpus Christi, Tex. He was elected a vice-president in 1945 and a director in 1947. In 1949 he was transferred to New York to take charge of supply, transportation, and distributing plants. He also has been active in sales.

## Grace & Co. Licensed to Sell Glidden Paints in S. America

Glidden Company, Cleveland, Ohio, and the paint manufacturing subsidiaries of W. R. Grace & Co. in Argentina, Chile and Peru last week concluded a technical know-how and licensing agreement.

Under the terms of the pact, which extends for a period twenty years, Glidden will furnish each of the three Grace affiliates with Glidden formulas, research data and merchandising, selling and engineering experience on the entire Glidden paint line.

The Grace subsidiary companies involved in the transaction are Grace y Cia. (Peru) Fabrica de Pinturas "Vencedor," Lima, Peru; Cia. de Industrias y Azucar, S. A., Vina del Mar, Chile, and Bacigalupo Cia. Ltda., S. A. de Barnices y Anexos, Buenos Aires, Argentina.

## Taussig Paint Co. Formed

Taussig Paint Company has been organized in Philadelphia, with Ralph J. Taussig as president, and Julius Taussig as secretary-treasurer. The president was for many years plant superintendent of Monroe, Lederer & Taussig, Inc. Julius Taussig, in the paint industry for more than thirty-five years, was a general partner of Monroe, Lederer & Taussig as well as chief chemist of the firm.

## *Nopco Executive Vice-Pres.*

G. Daniel Davis has been named executive vice-president of Nopco Chemical Company, Harrison, N.J. Mr. Davis will have full responsibility for the operation of the industrial division of Nopco, including sales, production and product development. Mr. Davis was made a director and secretary of Nopco in 1923 and became a vice-president in 1937.

## Agricultural Conservation Plans Largely Unchanged

The national agricultural conservation program for 1956 will be carried on on the basis of an appropriation of $250,000,000 and be operated similarly to the program of 1955, the Department of Agriculture announced last week.

The program will emphasize permanent conservation practices, but assistance will not be limited to such practices. Special emphasis will be given to measures which will protect land diverted from allotment crops in 1956.

### Cyanamid Names Plastics Ad Mgr.

T. M. Wennergren, since 1948 assistant to the advertising manager, plastics and resins division, American Cyanamid Company, New York, has been appointed advertising manager of the division. Mr. Wennergren succeeds H. W. Cyphers, jr., who resigned. The new plastics advertising manager became associated with American Cyanamid in 1947.

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# Textile and Leather Chemicals

Steady consuming demand was reported for most textile and leather chemicals last week. Consumers absorbed a good volume for prompt needs and there was noticeable improvement in orders for later delivery. Prices were held at prevailing levels.

There was no change in sizing materials. Market was steady at current quotations. Potato starch was well held in all positions. Offers from Maine were freer due to increased production, while supplies in Idaho were reported still tight. Fair volume of business was noted in tapioca flour. Trading was centered in Brazilian grades, which were available below the cost of Far Eastern replacements. Corn starch and dextrin continued in good request for prompt delivery.

Producers of rayon and acetate yarn, staple and tow shipped 102,000,000 pounds in May, a decrease of 9 percent, compared with April, but 11 percent more than May 1954, according to the Textile Economics Bureau. Exports amounted to 1,500,000 pounds in May. Shipments of regular and intermediate tenacity rayon yarn totaled 15,900,000 pounds, 18 percent less than in April and stocks increased to 18,800,000 pounds. Acetate yarn shipments totaled 20,000,000 pounds and were down 16 percent. In the rayon high tenacity category, shipments held to the April level of 35,700,000 pounds and stocks declined 15 percent. Shipments of both rayon and acetate staple and tow amounted to 29,400,000 pounds, while stocks at the end of the month declined 1,000,000 pounds to 21,100,000 pounds.

The United States remains the world's largest producer of rayon and acetate, with 1954 output of 1,085,700,000 pounds or 24 percent of the total. This compared with 29 percent in 1953 and a peak of 50 percent of the total in 1946. Japan last year was the second largest producer of rayon and acetate with 632,900,000 pounds; United Kingdom with 425,000,000 pounds or 9½ percent of the world total; Western Germany, 418,000,000 pounds; Italy, 275,500,000 pounds and France, 230,000,000 pounds. By continents, Europe showed a 12 percent increase, compared with 1953; North America, a loss of 7 percent; South America a gain of 27½ percent; Africa and Australia, a gain of 23 percent.

### *Price Trends*

**Advanced**
None
**Reduced**
None

**Comparative Price Indexes**
(100—1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 104.62 | 104.62 | 103.95 | 95.80 |

(*For Current Prices see Page 9*)

## Chemicals

**Sodium Hydrosulfite** — Trading was fairly active for prompt needs. Prices were firm and scheduled to advance ½c. per pound, July 1.

## Sizing Materials

**Corn Dextrin**—Moderate demand continued for prompt delivery. All grades were unchanged and steady. Gum was quoted at $8.95 per 100 pounds, paper bags, carlots, New York delivery; canary $8.69; dark $8.79, and white $8.53, same basis. Less carlots were 15c. per 100 pounds higher.

**Corn Starch**—Consumers continued to absorb sizable lots for immediate needs. Market was unchanged and steady. Pearl was held at $7.14 per 100 pounds, paper bags, carlots, New York delivery and powder, $7.29 per 100 pounds, same basis. Lesser quantities were 15c. per 100 pounds, higher. Visible corn supply was lower, declining 1,129,000 bushels to 28,015,000 bushels for the week ending June 10, compared with 15,468,000 bushels for the corresponding week last year, according to the Chicago Board of Trade.

**Egg Albumin**—Business was reported at a good rate for immediate and later delivery. Prices were unchanged and steady. Flake ranged from $1.60 to $1.64 per pound and powder, $1.64 to $1.68 per pound, depending upon quantity. Technical grade was in fair request and quotably unchanged at 70c. to 85c. per pound, as to quantity.

**Egg Yolk**—Buying interest was fairly active, with users taking moderate quantities for immediate and later requirements. Prices were well held at $1.08 to $1.10 per pound, spot according to quantity.

**Potato Starch**—Increased supplies of potatoes for grinding in Maine resulted in improved starch production and the few mills that were not shut down are working at capacity. This has increased stocks for prompt shipment. Carlots were offered at 7¼c. per pound, carlots, f.o.b. mills. Consuming inquiry was still light, but the market remained on a steady basis. Stocks in Idaho continued tight due to sold up production. Carlots were more or less nominal at 6¾c. per pound, f.o.b. mills. Inquiry for imported starch has slackened appreciably. French starch was quoted at 7.35c. per pound, carlots, duty paid, exdock. Stocks on spot locally were unchanged at 9c. to 9½c. per pound, exwarehouse.

**Sago Flour**—Trading was light and confined to supplies for spot delivery. Interest in replacements from primary sources was quiet. Prompt shipment was quoted nominally at 5¾c. per pound, carlots, exdock. Raw was unchanged at 6½c. to 6¾c. per pound and refined, 8¼c. to 8¾c., exwarehouse, as to quantity.

## Tanning Materials

Leather consumption in Greece has been increasing in the postwar years, primarily because of greater use of shoes by the rural population. Production of cattlehides and calfskins supplies only about 35 percent of tanning-industry requirements, making it necessary to import the remainder.

Latest official statistics on imports are for 1953 when 5,135 tons of unprocessed hides and skins were imported, chiefly from Argentina. Official statistics do not classify hide and skin imports by type, but since domestic production of goat, kid, sheep, and lamb skins are sufficient to meet local requirements, it is assumed Greek imports of raw hides and skins include only bovine types. Under Greek import control regulations, raw hides and skins may be imported into Greece free of quantity and quality restrictions.

**Chestnut Extract**—Tanners restricted demand to small lots for actual needs. Prices were unchanged for all grades. Liquid 25 percent tannin was quoted at 4c. per pound, tankcars, f.o.b. works; 4¾c. per pound, barrels, carlots, and 5.10c. barrels, less carlots; powdered 60 percent tannin, 10.32c. per pound, bags, carlots, and 11.02c. bags, less carlots; same basis.

**Cutch**—Consuming inquiry was fairly active. Shipments were well held at 8½c. per pound, exdock, plus duty.

**Mangrove Bark**—This market was firm and shipments of African were higher at $69 to $71 per ton, exdock, as a result of the increase in ocean freight rates, which were raised $1 per ton, June 15. Trading continued confined to occasional lots for prompt shipment. South American grades were quotably unchanged. Colombian was quoted at $58 per ton and Ecuadorian, $55, exdock.

**Myrobalans**—Offers for shipment were limited. Market was steady and unchanged. Buying interest was light and spotty. JI's were quoted at $66 per ton, exdock, for prompt shipment; crushed, $78 to $80, and Bombay, $60, same basis. Solid extract was maintained at 7¾c. per pound, exdock, plus duty.

**Quebracho Extract**—Trading was spotty, and restricted to nearby shipment. Market remained steady at prevailing quotations. Solid ordinary guaranteed 63 percent tannin was held at 11 21/32c. and clarified 64 percent at 12 23/64c. per pound, exdock, plus duty.

**Valonia**—While demand was light, the market was steady at current quotations. Offers for shipment were reported limited. Cups were quoted at $46 to $48, exdock, and beards $66 to $68 per ton, same basis. Extract was firm at 8c. to 8¼c. per pound, exdock, plus duty.

**Wattle**—Shipments of bark were firmer and lifted $1 per ton due to the higher cost of ocean freight rates. Trading was reported slow. Fair average bark was quoted at $99 per ton exdock and merchantable, $95 same basis, prompt shipment. Extracts were quotably unchanged, but buyers were charged with the increase of freight rates. East African was quoted at 9¾c. per pound, and South African, 10c. exdock, plus duty.

*For Late Market Developments, See Page 4*

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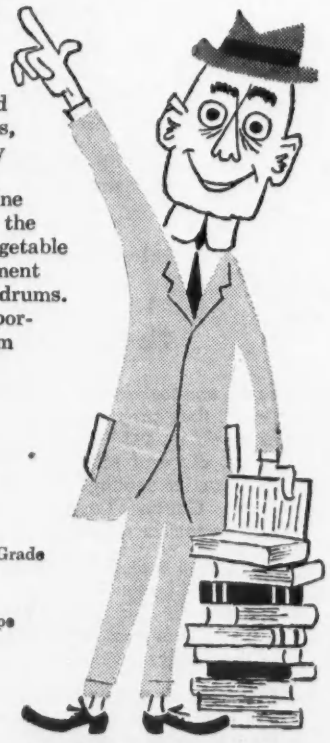
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# Oils, Fats and Waxes

Scarcity of crude cottonseed oil further strengthened the market and light sales took place at a fractional advance. This was reflected in other edible oils. Corn also was higher. Trading in edible grades was moderate, chiefly for nearby requirements. Peanut oil continued strong and limited stocks in the southeast were held at an increase of ½ cent per pound. Imported peanut oil offers were confined to July forward shipment. Soybean oil was unsettled, temporarily but closed firm despite the Department of Agriculture's announcement that it would offer defaulted soybeans for sale at the market price, but not less than the 1954 support price of $2.44 per bushel Chicago. Estimates placed bean stocks in warehouses at 10,000,000 bushels, while the amount of beans on farms will not be known for several weeks.

Trading in coconut oil was moderate, the market closing higher. Copra was stronger, up $5 per ton.

The tone of tallow and greases eased, when short covering subsided. Quotations declined fractionally late in the week. Domestic inquiry was light and consumers purchased stocks at lower prices at outside points. Export business also was limited and offers for shipment became more liberal at slight concessions at the close. Lard was firmer and up fractionally. Oleo oil was unchanged and quiet, while oleo stearine was higher.

Industrial oils remained steady, despite light trading. Linseed oil was well held for prompt delivery, while new crop oil was raised slightly. Oiticica oil was firmer and light offers were advanced fractionally. Trading in tung oil was spotty, but prices were maintained at former levels for imported and government owned oil. Trading in crude menhaden oil was still slow, as buyers and producers were about ½ cent apart. Higher soybeans, stiffened the meal market and quotations were lifted about $1 per ton. Cottonseed meal was in light supply and steady.

Carnauba wax market was unsettled by reports that the Brazilian government planned to change floor prices for shipments to a weekly basis. Both buyers and sellers withdrew from the market to await further developments. Prices became entirely nominal for all grades locally. Beeswax continued strong. Japan wax was scarce and higher on spot, reflecting stronger primary market.

## Vegetable Oils

**Castor**—Consuming demand for domestic oil was reported light and spotty. All grades were quotably unchanged. No. 1, Brazilian oil was firm, with offers scarcer. Prompt shipment was quoted at 12¾c. per pound, tankcars, New York basis.

**Coconut**—Crude was sold at 11⅝c. per pound, tankcars, f.o.b. Pacific coast, June shipment and 11½c., July. At the close, prices advanced ⅜c. to 12c. for June. The New York market was higher at 13c. per pound, tankcars, prompt delivery.

**Corn**—Market was firm, with competing oils. Offers of crude were scarce and sales took place at 15¼c. per pound, tankcars, f.o.b. mills. Refined was higher at 18¾c. per pound, tankcars, New York, prompt delivery.

**Cottonseed**—Bleachable cottonseed oil futures continued on a strong basis last week, again making new highs for July, September, and some of the new crop deliveries. Offers were limited especially of nearby oil with trade interests supporting July delivery. Crude oil was scarcer and higher. Cash oil also was firmer, advancing fractionally. Refined salad oil was higher at 18⅛c. per pound, tankcars, New York, prompt delivery.

Crude oil offers continued scarce and sales were again made at new highs. Trading was reported up to 14⅝c. per pound, tankcars, southeast; 14⅜c. in the Valley and 14c. to 14⅛c., Texas, according to location.

The government sold 3,660,000 pounds of crude oil at 11.83c. per pound, f.o.b. cars, mills and 300,000 pounds at 12.82c., for export.

The Department of Agriculture has requested offers to process and package approximately 8,834,032 pounds of hydrogenated cottonseed oil (shortening type) from CCC-owned stocks of once-refined cottonseed oil. The shortening is for domestic distriution to school lunch program and welfare outlets. Of the amount required, 8,069,952 pounds are to be packed in 3-pound cans and 764,080 pounds in new domestic shipping cases. Offers must be received on Form OPO 8/55 not later than 4 p.m. EDT, June 27. The department also has issued authorizations to Spain to finance the purchase from United States suppliers of up to $7,750,000 worth (about 42,000 bales) of upland cotton, and up to $5,000,000 worth of cotton seed oil.

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended June 17 follow:—

| | Sales | Cents per pound High | Low | Close |
|---|---|---|---|---|
| July | 87 | 16.63 | 16.40 | 16.59@16.60 |
| September | 52 | 15.60 | 15.42 | 15.55@15.60 |
| October | 12 | 14.82 | 14.80 | 14.78@14.80 |
| December | 21 | 14.56 | 14.48 | 14.46@14.52 |
| January | 3 | 14.56 | 14.50 | 14.48@14.52 |
| March | 31 | 14.54 | 14.45 | 14.47S |
| May | 1 | 14.45 | 14.45 | 14.42@14.45 |

Total sales, 207 contracts.

*Memphis.*—Crude cottonseed oil sold at 14¼c. per pound, tankcars, with 14½c. asked. Trading light. Market steady. Cottonseed meal quiet at $59 per ton, sacked Memphis; hulls, $13 per ton, bulk and $17 sacked. Demand slow.

**Linseed**—Trading continued restricted to fill-in requirements. Market, however, remained steady. Prompt shipment was quotably unchanged, while new crop oil was raised slightly. Raw oil was held at 13c. per pound, tankcars, Minneapolis, June-August; 12½c., September and 12.2c., October-December. Recent trading was reported at 12c. for October-December. Demand for oil against former contracts continued active.

*Minneapolis.*—Linseed oil users continued to replenish supplies mostly for nearby needs. Rank and file of trade was comfortably booked ahead. Prices held generally steady, which offered little incentive to add to commitments at this time. Raw oil, tankcars, f.o.b., Minneapolis, was quoted at 13c. a pound, for prompt delivery. Warehouse price was 13.2c. Shipping specifications continued brisk.

Shipments of linseed oil, in pounds, were as follows:—

| | 1954-55 | 1953-54 |
|---|---|---|
| Past week | 7,680,000 | 6,900,000 |
| Since Sept. 1 | 308,420,000 | 249,780,000 |

**Flaxseed**—National Flaxseed Processors Association reported crushing 1,600,482 bushels of flaxseed in May, 1955, and a total of 22,611,822 net bushels during the current marketing year August through May.

*Minneapolis.*—Flaxseed held in a rut again the past week, closing at $3.35 a bushel on spot and to-arrive offerings. Purchases were limited, totaling around a half dozen spot cars and 17 cars and 100,000 bushels in trucklots on a to-arrive basis. Receipts amounted to 464 cars as against 380 cars the previous week and 859 cars in the like week a year ago. Shipments from Minneapolis totaled 59 cars, compared to 52 cars the previous week and 257 cars a year ago. Weather was ideal for flaxseed growth the past week, trade reports said. Prior to the advent of 80-degree temperatures, it had rained for nearly two weeks.

Receipts and shipments of flaxseed, in bushels, were as follows:—

| | Receipts 1954-55 | Receipts 1953-54 | Shipments 1954-55 | Shipments 1953-54 |
|---|---|---|---|---|
| Past week. | 812,000 | 1,494,500 | 103,250 | 458,500 |
| Since Sept. 1. | 22,308,750 | 21,060,400 | 5,096,250 | 4,131,300 |

**Oiticica** — Market was stronger and prompt and forward shipments were raised ¼c. per pound. Tankcars were quoted at 12¼c. per pound, tankcars, New York basis. Drums were well held at 13½c. to 13¾c. per pound, according to quantity.

**Olive**—Market remained unchanged and steady. Stocks on spot were not burdensome and well held. Spanish oil was quoted at $2.30 to $2.40 per gallon, drums, duty paid, on spot, Greek, $2.25 to $2.30 and Tunisian, $2.15 to $2.20, same basis.

**Palm**—Demand was light and spotty. Market was steady, reflecting the firmness

For Late Market Developments, See Page 4

## Price Trends

**Advanced**

Cocoa butter, 4c. per lb.
Copra, $5 per ton.
Oil, coconut, crude, ¾c. per lb.
Corn, crude, ¼c. per lb.
refd., ¼c. per lb.
Cottonseed, crude, ⅛c. per lb.
refd., ⅛c. per lb.
Oiticica, ¼c. per lb.
Oleo stearine, ¼c. per lb.
Soybean meal, 50c. to $1 per ton.
Wax, Japan, 1c. per lb.

**Reduced**

Acid, lauric, ¾c. per lb.
Oil, soybean, foots, 95%, ¼c. per lb.
Wax, carnauba, Cerra, crude, 2c. per lb.
refd., 3c. per lb.

**Comparative Price Indexes**

(100—1949 average)

| Last week | Prev. week | Last month | June 18, 1954 |
|---|---|---|---|
| 103.88 | 103.72 | 104.19 | 109.35 |

(For Current Prices see Page 9)

of the primary market. Drums were quoted at 13c. to 13½c. per pound, spot, as to quantity and 11¼c., tankcars, prompt delivery.

**Palm Kernel**—Denatured oil was unchanged at 12c. per pound, tankcars, New York, prompt delivery.

**Peanut**—This market was entirely nominal due to the scarcity of supplies. Tankcars were quoted nominally at 18½c. per pound, southeast. Shipments from abroad also were scarce and quoted at 14c. per pound, c.i.f. Atlantic ports. Refined oil was quiet and nominal at 21½c. per pound, tankcars, New York, prompt delivery.

**Rapeseed**—Buying interest lagged, but prices were maintained at 16c. per pound, tankcars, New York, June delivery and 15¾c. for July.

**Soybean**—This market remained steady despite the Department of Agriculture's announcement that it would offer defaulted soybeans at the market price, but not less than the 1954 support which is $2.44 per bushel, Chicago. The national average price is $2.22 per bushel. Stocks of beans in warehouse were estimated at 10,000,000 pounds, while the total on farms will not be available for several weeks.

Crude oil at the close was held at 12¾c. June; 12⅜c.., first half July and 12¼c., second half; 12c. scattered, August; 10¾c. nominal, October-December, same basis. Refined salad oil was maintained at 15¾c., tankcars, New York, prompt delivery.

Sales and prices of crude soybean oil futures on the N. Y. Produce Exhange in tankcars (60,600 pounds) for the week ended June 17 follow:—

| | Sales | Cents per pound—High | Low | Close |
|---|---|---|---|---|
| July | 27 | 12.20 | 12.10 | 12.18S |
| September | 18 | 11.48 | 11.35 | 11.45S |
| October | 26 | 10.94 | 10.85 | 10.85S |
| December | 37 | 10.67 | 10.57 | 10.55S |
| January | 2 | 10.63 | 10.60 | 10.36@10.50 |
| March | 44 | 10.57 | 10.45 | 10.42S |
| May | 10 | 10.56 | 10.43 | 10.38@10.44 |

Total sales, 164 contracts.

**Tung**—Trading was light, with sales reported on the basis of 23¼c. to 23⅜c. per pound, tankcars, New York basis. Domestic oil was 1c. less f.o.b. mills. Drums ranged from 24⅞c. to 25¼c., spot, depending upon quantity.

## Miscellaneous

**Castor Beans**—Market was quiet, with shipments quoted nominally at $110 per ton, c. and f. New York.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

| | Pounds—Beans | Oil |
|---|---|---|
| Last week | 862.350 | 3.720.000 |
| Previous week | | 738.000 |
| Corresponding week, 1954 | 4.735.500 | 1.000.000 |
| Total this year | 49.609.265 | 41.538.000 |
| Corresponding period, 1954 | 51.546.800 | 17,496.000 |

**Cocoa Butter**—Market was stronger with higher cocoa. Prices advanced to 63c. to 68c. per pound, spot as to quantity.

**Copra** — Trading was reported light. Prompt shipment was quoted at $165.00 per ton, c.i.f. Pacific coast.

## Fats and Greases

**Greases**—Prices were raised fractionally early in the week due to short covering but an easier tone developed when demand dried up. Yellow grease was sold at 6½c. per pound, tankcars, delivered. Choice white all hog was nominal at 8¼c. and not all hog, 7¾c. House was nominal at 6¼c. and brown, 5⅛c., same basis.

**Lard**—Futures were firmer and fractionally higher. Cash lard advanced to 12.47½c. per pound, drums, Chicago.

**Oleo Oil**—Business was restricted to actual needs. Extra was unchanged at 14¾c. to 15c. per pound, drums, spot as to quantity. Oleo stearine was higher at 11¼c. per pound, barrels, same basis.

**Tallow**—Short covering raised quotations slightly early, but market became easy when demand was satisfied. Bleachable fancy was quoted at 7⅛c. per pound, tankcars, delivered. Extra was quoted at 6⅞c.; special, 6⅝c.; No. 1, 6⅜c. and edible, 10¾c., same basis.

## Fish Oils

**Cod**—Offers from primary sources were light and well held at 8¼c. per pound, drums, exdock. Consuming inquiry was slow. Drums on spot were unchanged at 11c. per pound.

**Refined Fish**—Fair demand was reported for refined grades. Prices were well held at former levels. Light pressed was unchanged at 10c. per pound, tankcars, New York basis. Menhaden catch was reported at about seasonal levels in the Gulf, but was poor on the Atlantic coast due to bad weather. Trading continued quiet as bids were about ½c. below asking prices. Crude oil was nominal at 7½c. per pound, tankcars, f.o.b. Atlantic coast and 7⅞c. per pound, f.a.s. Menhaden oil production in April totaled 118,105 gallons, against 286,990 gallons, April last year.

## Fatty Acids

This market continued firm, reflecting the strength of basic materials. Consumers continued to take moderate quantities for prompt delivery. Oleic, stearic and tallow acids were quotably unchanged, despite the advance in tallow. Vegetable acids also were well held at former levels.

## Cake and Meal

**Cottonseed Meal**—Demand for meal continued slow. Mills are not pressing to sell any large quantities, although there seems to be sufficient supplies throughout the southeast to take care of the demand. Meal forty-one percent was offered at $59 per ton Memphis; $62 Alabama, Georgia; $64 South Carolina mills June shipment.

**Linseed Meal**—Demand spotty. Prices unchanged and fairly steady.

*Minneapolis.*—The linseed meal situation was unchanged, with extracted type quoted by processors at $56 to $56.50 per ton, bulk, carlots, f.o.b., Minneapolis, and the expeller bringing an added premium of $4 a ton. There was a steady replenishment trade, crushers reported. Shipping directions came in at a steady rate.

Shipments of linseed meal, in pounds, were as follows:—

| | 1954-55 | 1953-54 |
|---|---|---|
| Past week | 6.320.000 | 6.180.000 |
| Since Sept. 1 | 549.420.000 | 542.770,000 |

**Soybean Meal**—Prices were somewhat firmer in the face of a better board market, but demand has not shown any appreciable increase. Stocks are still plentiful and buyers are not easy to push into making any long term contracts, but admit meal is priced cheaply. Unrestricted meal was offered at $50.50 per ton Decatur immediate through September shipment. Material restricted to certain areas can be bought at $50 basis Decatur for June-September shipment.

## Waxes

**Beeswax**—This market continued firm, due to the scarcity of crude on spot and offers for shipment. African crude was reported unavailable for prompt shipment with trading at 65c. per pound, for July-August shipment. Refined grades were strong and manifest an upward trend.

**Carnauba**—Reports from Brazil that the government contemplates changing floor prices of shipments to a weekly basis, upset the market and brought trading to a standstill. Quotations of most grades were merely nominal. Sellers and buyers withdrew to sidelines to await further developments of the new plan. Refined Ceara grades were reduced 2c. to 3c. per pound in some directions. Pure refined was quoted at 65c. to 66c. and technical, 62c. to 63c. per pound, according to quantity. Crude No. 3, Ceara crude ranged from 57c. to 59c. per pound, same basis.

**Japan**—Higher cost of replacements and scarcer stocks on spot further strengthened this market. Light supplies were advanced to 42c. to 44c. per pound, depending upon seller and quantity. Offers from Japan were scarce and limited to September-October shipment.


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|---|---|
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| Color Gardner 1933 | 3 — 5 |
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| Saponification Value | 196 — 202 |
| Acid Value | 195 — 201 |
| Iodine Value (WIJS) | 123 max. |

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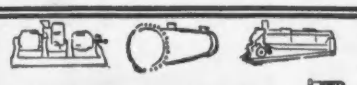

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±40 Imp Mill, 50 H.P., auxiliaries
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W&P Mixers, Jktd, 10 gal., 60 H.P. mtr. Masticator arms
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Powder Mixers, 100 to 2000 lbs.
Twin Drum Dryer, 42" x 120"
Rotary Vac. Dryer, 30" x 96"
Spray Dryer, s/s, 10' x 36'
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Centrifugal Extractor, 40", s/s
Devine ±20 Vac. Shelf Dryer
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**NEW AND GOOD-AS-NEW EQUIPMENT**

1—Brewer Ampul Washer, Stainless Steel, 7000 ampuls per hour, 6-box type.
1—Stainless Tank ±430 Chrome, vert. 7'x10' deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Robbins Vibrex 3x6 Vibrating Screen, single deck.
1—Copper Evaporator, steam jacketed, 9'1"x3'9".
69—New Pressure Cookers, 18"x18" & 24"x28".
150—Pumps—steam and electric.
1—New Glass Nash Centrifugal Pump, 160 gpm.
1—Buflovak Jacketed Impregnating Tank 42"x52".
1—4x8 Sturtevant Jaw Crusher.
1—Ribbon type Mixer, steam jacketed.
1—Abbe Ball Mill, 36"x42" Buhrstone lined.
±316 Stainless Steel Tanks, new 100, 200 & 360 gal.
2—Nash Air Compressors, Type AL-625.
1—Manton Gaulin Stainless Homogenizer 125 gph.
2—I&R Vacuum Pumps, 5 H.P., 60' & 100'.
4—New Heat Exchangers, 12" dia. 11' lg., 43 steel tubes, 2 passes.
1—Kennedy-Van Saun Rotary Dryer, 4'x40'.
Davenport Rotary Steam Tube Dryer, 6'x36'.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—±316 Stainless Reactor, 265 gals. cap., jacketed.
Abbe Pebble & Tube Mill, 5'x22"—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 17"x27".
1—Patterson Ball Mill, 42x36, jacketed.
3—Dopp Kettles with agitators 600 gal. cap.
45—Steel Tanks from 100 to 100,000 gals.
2—Large Steam Jacketed Horizontal Mixers, Robinson Pulverizer ±20, with 2 motors 10 HP each, Robinson Ribbon Type Mixer, 30"x10"—like new.
4—Horizontal Retorts 200± w.p., A.S.M.E., from 12" to 24" dia., 4' to 12' long.
2—Crystallizers—10' long.
1—Patterson Kelly Blender 5 cu. ft. Stainless Steel, with baffle plates and 1 H.P. motor.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—±10 J. H. Day 300 gal. Sigma Blade Mixer, Jacketed.

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DRYERS AND KILNS
Stokes 2'x6' Rotary Vac. Dryer.
Devine ±12 Vac. Shelf Dryer, 40"x42".
2—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20"

CENTRIFUGALS AND CENTRIFUGES
4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & ±6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
1—Vallez Filter ±49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Sweetland & Oliver Filters.

KETTLES AND TANKS
Dopp 350 gal. Agit. Jack CI Vac Kettle.
2—Impreg. Units 30" & 36" dia. complete.
500 & 1,000 gal. closed Jack. Steel Kettles.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead lined Kettle.
Stainless, alum., copper. Glass lined, lead lined and steel kettles and tanks.
Copper & Stainless Varnish Kettles.

PULVERIZERS AND MILLS
2—Mikro Pulverizers #2TH & 4TH.
Abbe 37"x30" chrome-mang. Ball Mill.
Patterson Pebble Mills, 6'x8', 6'x5', 30"x42".
Abbe 30"x30" & 30"x36". Also Jar Mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—±00 Raymond Mill, 30 HP complete.
2—±0000 Raymond Mills.
Sturtevant ±0, 18" hinged Hammer Mill.
Schutz-O'Neill ±1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
Buchanan 5"x12" Jaw Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ H.P. Colloid Mills.

MIXERS, SIFTERS & SCREENS
Lancaster 6' dia. Vert. Mixer 25 HP.
Kent 3 HP. continuous dry mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. spiral mixer.
2—American Tool 300 gal. Churns.
Read 50 & 100 gal. double arm mixers.
Read 80 qt. vert. mixer, 3 speed.
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS
Kux 2½" dia. Tablet Machine.
Anderson & French Oil Expellers.
Tablet Machines Single & Rotary Types.
Kane 2 H.P. Gas Boilers, 200± pressure.
1—Knapp Model S Can Labeler M.D.
3—Stokes and Day Powder Fillers.
Samco Jr. Vac. liquid filling machine.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
8—Devine, Buffalo, Stokes Vac. Pumps.
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Soap Machinery for Toilet, Laundry, etc.
Centrif., Rotary, Duplex & Triplex Pumps.

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NEW STAINESS STEEL MIXERS DOUBLE RIBBON from 200 to 2,000 lb. capacity.
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1—S. & S. Model HG84 Automatic Powder Filler.
1—Blaw-Knox 110 Gal. Jack. Ag. Autoclave 2000 psi.
1—Horiz. Jack. Autoclave 30" x 48" x 84" deep.
1—Keeler 350 H.P. Type CP Boiler 160± W.P.
1—Davis Inconel Heat Exch. 195 Sq. Ft.
8—Surface Condensers and Receivers, 100 to 175 Sq. Ft.
8—Unused Pfaudler 100 Gallon Glass Lined Vacuum Receivers.
1—Carrier Atmos. & Truck Dryer.
3—Devine Double Dr. Vac. Shelf Dryers 17 & 20 Shelf 59" x 78".
1—Allbright-Nell 4' x 9' Double Drum Dryer.
2—Haines 1500± Vertical Powder Mixers.
2—Fitzpatrick Model D Comminuters, S.S.
6—C.I. Filter Presses, 12" to 30".
2—Sweetland Filters, ±10 & ±12.
3—Sparkler Stainless Filters 8-6.
1—Standard Knapp 429 Automatic Case Sealer and Compression Unit.
1—Ceco Carton Sealer, high & low plows.
1—Glasscote 750 Gal. Jack. Glass Lined Kettle 75± W.P.—Perfect. Coded.
2—Pfaudler Reactors, 100 & 500 Gal. G.L.
4—Eppenbach & Premier Colloid Mills, S.S. 1 to 50 gph.
5—Eureka #3 Jar Mills 14 Gal.
5—W. & P. Mixers—20 Gal., 100 Gal., 200 Gal., Double Arm.
3—Rotex Screens 20" x 48" to 40" x 120".
1—Stainless Steel Tank 2100 Gal., w/coil.
2—Vert. Type 316 S.S. 4000 Gal. Tanks w/coils.
1—Transwrap Model B Automatic Fin-Seal.

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## Explosives Rules Changes Approved by Coast Guard

A number of changes in regulations relating to the transportation and storage of explosives or other dangerous articles on board vessels were approved last week by the Coast Guard. At the same time, hearings were announced for July 12 at the Coast Guard Headquarters, Washington, D. C., on two other important proposed changes.

One of the changes has to do with the stowage of nitro carbo nitrate. A petition of E. I. duPont de Nemours & Co., Wilmington, Del., proposes to permit nitro carbo nitrate to be loaded, transported, and stowed with high explosives except those classified as initiating explosives or detonating primers. This is in line with regulations of the Interstate Commerce Commission relating to transporting this material by rail.

The other proposed new change relates to transportation of elemental phosphorus in bulk. A petition of Mathieson's Tanker Industries, Inc., Philadelphia, Pa., joined in by Victor Chemicals Works, Chicago, as a prospective shipper, seeks permission to use a pressure system employing a hot water displacement method for the transfer of the cargo from ship to shore. The system is presently permitted by the ICC in transferring elemental phosphorus in bulk from railroad tankcars to storage tanks.

The system is an alternate method for the stowage and handling of elemental phosphorus in bulk and was stated to have the following advantages over the method presently allowed:—

● The tanks are built to withstand sixty pounds per square inch pressure and, therefore, are not so susceptible to leaking as the gravity tanks presently permitted.

● Since phosphorus contracts considerably in cooling, the use of a vacuum relief valve may permit the intake of air into the cargo space. On the other hand the use of a pressure type tank permits the sealing of the tank so that continued contraction of the phosphorus during cooling only creates a slight vacuum and allows no entrance of air. In addition, the evaporation of the water cover does not occur.

● The cargo transfer from storage tank to the tank barge or vice versa is less hazardous because a positive water coverage of phosphorus in both the tank barge and the short storage tank can be maintained at all times.

The amendments to the regulations approved by the Coast Guard were published in the *Federal Register* June 10 and became effective immediately. They are based on Item I in the agenda of the public hearings held by the Merchant Marine Council last March 22.

## Surface Chemicals Expands Its Line of Specialty Coatings

Surface Chemicals, Inc., a division of McKay Company, has rounded out its line of specialty coatings by the inclusion of a series of coatings recently developed at its McKees Rocks, Pa., laboratories and plant.

There is available in this group new fire retardant mastics and catalytic coatings of the isocyanate and epoxy types. A newly-developed two component foaming resin called "Isothane" promises to broaden the application of foamed plastics since the surface chemicals system of application allows the resin to be foamed at the point of use. Even voids and cavities normally inaccessible, can be foam-filled with "Isothane" under the technics developed at Surface Chemicals laboratories, it was said.

The full line of products includes epoxy films, adhesives and fillers of all types. Technical bulletins on all products are avaiable by writing Surface Chemicals at 1101 Thompson avenue, McKees Rocks.

## *Acrolein Development Told*

*—Continued from page 5*

cases exhibit a high order of reactivity approaching that of acrolein itself.

A call for Europe to reduce its taxes on motor gasoline, if it hopes to make better use of its petroleum fuel sources, was issued at the congress by William M. Holaday, director of the research laboratories of Socony Mobil Oil Company, New York, and by Ralph E. Albright, also of Socony. Noting that these taxes total from 50 to 75 percent of retail prices, they said that cuts in diesel fuel levies also were in order to enable it to compete with residual fuel and coal.

Later in the meeting, J. P. Cunningham of Shell Chemical Corporation, New York, a subsidiary of Shell Oil Company, reported to the delegates that the world's oil industry is going into the chemical business in a big way. He noted that in the United States almost $4,000,000,000 worth of chemicals based on petroleum would be produced in 1955.

It has been estimated, Mr. Cunningham pointed out, that by 1965 natural gas and products from oil refinery operations will be used in as much as 50 percent of the national production of chemicals of all types.

At the close of the congress, the chairman, Prof. Marcello Boldrini, president of the Italian state-owned AGIP oil combine, reported that nobody could yet say whether atomic energy represented a threat to the petroleum industry. However, he stated that he thought it safe to forecast an insatiable demand for oil in the next twenty-five years or so.

Signor Boldrini noted that a rapidly rising world population, a soaring need for synthetic textiles, rubber and other materials, and the enormous expenses required for peacetime use of atomic energy would contribute to an increased demand for petroleum products. He went on to declare that the coal industry had not on the whole been damaged by the coming of the oil age.

## Ferro Corporation Reports Promotion of Ernest Felker

Ernest S. Felker, southern representative of Ferro Corporation on glazes and color oxides for the clayware and plastics industries located in Dallas, Tex., has been promoted to the position of administrative assistant to the manager of the color division in Cleveland, Ohio headquarters of Ferro.

Jack W. Godbold will take over the southern territory about July 1 and will also maintain his headquarters in Dallas. Mr. Godbold will go to the Ferro from the S. P. Ward Company, Los Angeles, where he was employed as a sales engineer. It was also announced that the Denver, Colo., and Kansas City, Mo., areas will be handled from the Chicago territory under the administration of Henry W. Fishkin, headquartering in the Chicago territory offices at 336-338 North Central avenue, Chicago. This territory change was put into effect because of increased activity in the Texas and adjoining geographical areas of the products handled, Ferro said.

## Vinyl Wire Coating Resins Made Available by Monsanto

Three new vinyl compounds for wire coatings, designated "Opalon," have been developed by the plastics division of Monsanto Chemical Company, at Springfield, Mass. "Opalon 1038" is said to be a primary insulation compound approved by Underwriters' Laboratories for type T and TW uses and exposure to oil at sixty degrees centigrade, and is applicable for use in manufacture of large size building wire and cable.

"Opalon 72254" is a general purpose, flame-retardant jacketing compound, recommended for sheathing applications requiring good physical properties, flame retardancy, low temperature performance and weatherability. Specific applications include telephone cables. "Opalon 72217" is reported to be specifically for switchboard cable jacketing and inside telephone wire jacketing, incorporating high shear strength, flame retardancy and high tear resistance.

### N.E. PVLA Annual Outing Set For Friday at Andover, Mass.

The New England Paint, Varnish and Lacquer Association has scheduled its annual outing for June 24, and has announced the names of officers picked by its nominating committee. The outing will be held at Andover Country Club, Andover, Mass., with golf scheduled for the entire day and dinner at 7:00 p.m. Harry Kelfer has been nominated for the post of president in the new term. Other nominees are:—Vice-president, Ben F. Sands; secretary-treasurer, J. Ralph Stout; members of the executive committee, H. A. Hall, J. M. Healy, C. K. Mullin.

### *Glass Container Shipments: April*

Total shipments of wide-mouth glass containers in thousands of gross during April were 6,860, compared with 7,061 in March, according to the Bureau of the Census. In this category, the amount used for medicinal and health supplies was 1,210 in April, compared with 1,425 and toiletries, 701 in April, compared with 823 in March.

Total shipments of wide-mouth glass containers in thousands of gross during April were 3,562, compared with 3,869 in March. In this category, the amount used for medicinal and health supplies was 344 in April, compared with 437 in March; and toiletries and cosmetics, 144 in April, compared with 204 in March.

**MIXERS**—Lancaster EAG3, Stokes 13 gal., 400 & 1200# spiral blenders.

**AUTOCLAVES**—S S one gal., 1000 psi w/agitators, jackets.

**PULVERIZERS**—Gruendler 2XA (16x14), Williams GA30, (24x30) Jeffrey 30x30, Sturtevant #1 ring roll.

**SCREENS**—Link Belt 2x5 (double), Tyler 3x5 (single triple) Robbins 4x12, triple, Robinson Gyro sifters (size 28).

**SEPARATORS**—Gayco 5', 6', 8' dia. Door Rake Classifier (rubber lined).

**PEBBLE MILLS**—14 gal. jar, 30x42, 4'x5', 6'x5' porcelain lined, 2'x3' S S & 50x30 ball, all w motor drives.

**FEEDERS**—Hardinge style B, Syntrons S S F44 w. solenium rectifier.

**HARDINGE CONICAL MILLS**—2'x8" lab. 6'x22", 6'x36" (air swept) 7'x36" Pebble (air swept).

**ROTARY DRYERS**—3'x32', 4½'x40' w variable speed drive.

**EXHAUSTERS**—American, Buffalo, Clarage, Sturtevant—3500 to 35000 CFM, Spencer Turbo 1300 CFM—16 oz.

**NASH HYTOR VACUUM PUMPS**—MD673, 623, H-7, Ingersoll Rand 16 cfm, 2 stage.

**CRUSHERS—ROLL**—Sturtevant 8x5, 18x18, 32x12, 42x16.

**FORK LIFT**—7500# Hyster-new pneumatic tires, new engine.

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### CENTRIFUGES

Merco B9, SS, 15 HP.
Tolhurst, 20", SS, perf. basket.
Fletcher, 40", SS, perf. basket.
Sharples C20, SS, Super-D-Hydrator.
Sharples D2, SS discs. NEW.
Sharples C27, SS, Super-D-Hydrater.
Sharples PN14, SS, Super-D-Canter.

### COLUMNS

SS 18-8 Scrubber, 12"x15'.
SS 347 lined, Scrubber, 5'x18'.
SS 347, 6'x29', 21 trays.
Steel, 4'x53', 23 trays, 160 PSI.
Steel, 2'x47', 28 trays, 375 PSI.
Steel, 3'x49', 28 trays, 425 PSI.
Everdur, 5'x23', 24 trays.
Karbate #22, packed, 19"x12', NEW.

### DRYERS

Rotary Vac. 5'x15' nickel clad.
Rotary 26"x8' oil fired with feeder.
Rotary Vac. 30"x8', Stokes 59AB.
Rotary 4'x27' oil fired, motor drive.
Rotary 5'x67' 6" lifters.
Rotary SS, 4'x30', complete.
Rotary Kiln 8'x125'x¾" firing hood.
Rotary Kiln 10'x200'x¾" oil & gas burners, comb. chamber, dust collecting system.
Roto-Louvre 604-24 complete w/furnace.
Roto-Louvre 705-20 SS heating coils comp.
Roto-Louvre 310-12, heating coils, comp.
Roto-Louvre 502-20 comp. w/furnace.
SS Spray, 10'x36', gas fired.
Single drum, 5'x6' atm., scraper.

### FILTERS

8'x12' Feinc, steel, string discharge.
8'x10' Oliver, steel, drum.
Sweetland #5, SS lined, hyd. closure.
5'x3' Feinc, string discharge, steel & rubber. NEW.
3'x4' Oliver, steel, complete.

### HEAT EXCHANGERS

100 sq. ft. SS 40# shell 60# tubes.
205 sq. ft. SS 100# shell 200# tubes.
180 sq. ft. steel shell copper tubes.
198 sq. ft. steel 325# Adm. tubes 125#.
252 sq. ft. steel 400# shell 150# tubes.
415 sq. ft. steel shell 125# Adm. tubes 50#.
550 sq. ft. steel 325# shell 160# tubes.
1035 sq. ft. steel 250# shell & tubes.
1800 sq. ft. steel shell Everdur tubes.
3300 sq. ft. steel 150# shell & tubes.

### MIXERS

100 gal. Readco jktd. dbl. sigma blades power & tilt.
170 gal. Ajax dbl. arm, power pump.
1050 gal. Paddle dbl. shaft heavy duty NEW.
3900 gal. hor. jktd. 75 PSI paddle agitator.
29 cu. ft. Patterson Conical Blender.
67-27-10 cu. ft. SS Sprout Waldron Powder.
550 cu. ft. SS jktd. rotating oscillating.

### PULVERIZERS

Raymond 50", 5-roll high side.
Raymond #1 Automatic.
36"x30" Jeffrey Flextooth.
10'x48" Hardinge Ball Mill.
Raymond #40 Imp, Stainless.

EXTRUDER—Stainless Steel Screw 2½".
HYDRATOR—Lime, Clyde #3.
KOMBINATOR—Flowmaster K200.
MICROSCOPE—Electronic RCA, complete.

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**2—BUFLOVAK 6'x5'6" SINGLE DRUM MONEL FLAKERS.**

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**3—SCHALLER 4'x13' 316 S.S. REACTORS WITH TUBULAR CALANDRIAS, 513 SQ. FT. EACH.**

**1—PFAUDLER 250 GAL. HASTELLOY "C" REACTOR.**

**2—I. R. JET REFRIGERATION UNITS 208 AND 136 TONS.**

**1—PATTERSON 7'6" CONICAL BLENDER, RUBBER LINED.**

**1—RIETZ 30' "THERMOSCREW" CONVEYOR DRYER, 304 S.S.**

**1—WESTERN PRECIPITATION 12' "HOLO-FLITE" CONVEYOR DRYER, 316 S.S.**

**1—ILLCO DUPLEX ION EXCHANGE NEUTRALIZER, 316 S.S.**

**2—PFAUDLER 2300, 1200 GAL. GLASS LINED TANKS.**

**1—LINK BELT TWIN SCREW CONVEYOR, 316 S.S., 18"x10'.**

---

**10—Alberger Karbate Heat Exchangers, 370, 255, 188, 170, 159, 70 and 16.4 sq. ft.**

**1—316 S.S. Hopper, 7500 gal.**

**2—Karbate Centrifugal Pumps Series 3A, 5 HP XP motors.**

**3—Lawrence 316 S.S. Vertical Centrifugal Pumps 3" and 1½".**

**4—Link Belt 12" rubber belt Conveyors, totally enclosed 30' to 77' cc.**

**2000 ft. 2" to 4" Saran lined pipe with fittings and 200 valves—316 S.S. fittings and valves—Karbate glass and glass lined pipe and fittings—instruments—explosion proof motors—fixtures—steel buildings.**

## IN STOCK

### DRYERS

**2—Link Belt Roto-Louvre 6'4"x24', 3'10"x12', steel.**
1—Link Belt Roto-Louvre 7'5"x20', stainless steel.
2—Hersey 4'x30', 3'x20' S.S. Hot Air Rotary.
**2—Struthers-Wells 5'x15' nickel Rotary Vacs.**
2—Buflovak 32"x52" atmos. double drum 316 S.S.
1—Devine 2'x4' Vacuum Drum, 316 S.S.
1—Stokes 138H Vacuum Shelf with 10—44"x40" shelves.
1—Devine double door Vacuum Shelf with 17—59"x78" shelves.
3—Stokes Rotary Vac. 3'x15', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
**3—Rotary Dryers 5'x30', 5'x40', 4½'x50'.**

### MIXERS

8—Day Cincinnatus double arm 660, 250 and 100 gals.
3—Baker Perkins 100, 50 gal. double arm, jacketed.
7—Sprout Waldron S.S. jacketed, Powder, 67, 27 and 10 cu. ft.
1—Struthers-Wells 6'x9' S.S. Rotating, jacketed.

### MILLS

1—Patterson 3½'x4' jacketed, steel Ball Mill.
**5—Mikro Pulverizers #4TH, #3TH, #2TH, #2DH.**
1—Hardinge 6'x22', Conical, steel lined.
3—National 10"x20", 6"x12" Two-Roll Mills with motors.

### CENTRIFUGES

1—Sharples PN14 Super-D-Canter, 316 S.S.
1—DeLaval AC-VO continuous 304 S.S.
2—Sharples C-20, C-27, Super-D-Hydrators, 316 S.S.
2—Bird 18"x28" solid bowl, continuous, 310 S.S.
3—Sharples P16 Monel and S.S. Pressurtite Super Centrifuges.
3—Tolhurs AT&M 40", 36" and 32", Suspended, steel, perforated basket, M.D.
1—Bird 40" Suspended, rubber covered, imperforate basket, M.D.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Tolhurst 26" suspended, 316 S.S., perforated basket, M.D.
1—Tolhurst 26" suspended, rubber covered, perforated basket, M.D.

### TOWERS — REACTORS — CONDENSERS

2—Pfaudler 200 and 100 gal. glass lined, jacketed, agitated.
1—Buflovak 800 gal., 347 S.S., jacketed, agitated.
1—Blaw Knox 3000 gal., 304 S.S. Reactor.
1—7'x25' 6" S.S. Tower.
10—715, 458, 357, 108 sq. ft. Atmospheric S.S. Tubular Heat Exchangers.
3—2400 sq. ft. Admiralty Tube Heat Exchangers.
3—50 to 350 sq. ft. S.S. Tubular Heat Exchangers.

### FILTERS

**2—Oliver 8'x10' Monel Rotary Vacuum.**
1—Oliver 8'x6' S.S. Rotary Vacuum, UNUSED.
2—Oliver steel 5'3"x6' Rotary Vacuum.
1—Niagara 110-20 Filter with 12 S.S. leaves.
2—#3 Sweetland S.S. Filters with 12—25" dia. leaves 75 sq. ft.
2—#5, #7 Sweetland Filters with 15 and 27 leaves.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

### MISCELLANEOUS

4—Orville Simpson Rotex Sifters 40"x120", 40"x84", 20"x81".
2—Stokes #DD2 and #D3 Rotary Tablet Machines.
7—Nash vacuum pumps #H7, #H6, #L5, #L3, #4, #2.
7—Durco S.S. centrifugal pumps 1" to 3".

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# PERRY EQUIPMENT CORP.

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### *STAINLESS STEEL TANKS*

1—10500 gal. Horiz. T304—NEW.

1—6500 gal. Vert. Clad—Used.

1—4500 gal. Vert. T304—NEW.

1—2600 gal. T347 Vacuum Receiver with 15# jkt.

1—2000 gal. Vert. Clad—Used.

40—From 15 gal. to 1000 gal.

15—Stainless Steel Stock Pots—30 gal., 16 gal., 14 gal.

1—T316 Bin or Hopper, 6'9" x 6'9"x10' O.A.H., 275 cu. ft.

## RECENT PURCHASES

1—1300 gal. T316 St. St. Jktd. Kettle, ⅜" shell, St. St. Turbo Agitator 25 HP—37 RPM.

1—Rotary Kiln 6' dia. x 50'6" L x ½" shell.

1—Goslin-Birmingham Quadruple Effect vertical long tube Evaporator, total 6965 sq. ft. copper tubes.

1—Conkey Triple Effect vertical long tube Evaporator, total 1900 sq. ft. copper tubes. UNUSED.

6—80 gal. Copper Jktd. Kettles with single motion agitators.

1—Day 30 gal. double arm sigma blade Jacketed Mixer.

1—Blaw-Knox 15 gal. T347 Stainless Steel Pilot Plant (Resin Kettle, Jkt. & Agit.)

2—Blaw-Knox ½ gal. Stainless Steel Autoclaves, 2000# Pr., agit.

1—8800 gal. Horiz. Welded Steel Pressure or Vacuum Cooker, Agit., ASME.

2—Fitzpatrick Comminuting Machines, St. St.—Models D-6 & F.

1—4' x 5' Patterson Steel Ball Mill, Jacketed.

2—W & P 100 gal. Sigma Blade Jacketed Mixers.

1—500 gal. T316 St. St. Evaporator with 145 sq. ft. hairpin coil.

5—Steel Shell & Tube Condensers, 1200 sq. ft. unused, 75# WP.

2—Charlotte #50 Colloid Mills.

1—Sharples 16P Pressurtite Centrifuge, St. St. Unused.

1—Oliver Precoat Rubber Lined Vacuum Filter 5'3" x 3', closed pressure housing.

5—Shriver 30" C.I. Filter Presses, open dely., up to 50 ch.

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NICKEL CLAD KETTLE, ASME JKTD. AGIT., 750 GALLON.

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HEAT EXCHANGERS—500 sq. ft. Carpenter 20 S.S., 240-1"x8' tubes.
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MIXERS—DRY POWDER—400, 600, 1,000, 1,500, 2,000 & 3,000 lb.
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# HERE'S VALUE

4—Stainless Steel Merco Type C-30 Continuous CENTRIFUGAL SEPARATORS, each with 100 H.P. TEFC motors & controls. New 1954.
2—8'x125' Rotary Kilns.
2—S/S Hersey Rotary Dryers 5'x26' and 6'x23'.
3—6'6"x50' D. H. Rot. Dryers, ⅝".
2—3'x50' Rotary D. H. Dryers or Coolers.
1—Buflovac 42x120, 32x120 Atmos dbl. Drum Dryers, complete; 1—American 24x36
1—#2 Simpson Mixer, motor drive.
3—Unused #12 Sweetland FILTERS, 48 bronze monel covered bottom drainage leaves 3" c/c. Latest type.
1—#2 Sweetland Filter, 23 copper lvs., 1½" c.c.
2—54"x70" and 1—40"x60" Bird Continuous Centrifugals, S/S Solid bowls.
2—Sharples C-20 & C-27 S/S Super-D-Hydrators.
1—2TH Micropulverizer.
2—1,000 gal. Monel, jack., agit., closed kettles.
1—Buflovac 48"x40" Drum Flaker, chrome plated, s/s ends.
1—Sperry 24" x 24" iron Filter Press, P&F, 25 ch., 2" cake.
9—Sperry 18"x18" iron Filter Presses, 11 chambers.
1—50 gal, stainless 347 Calandria Still, agitated, sight glasses.
1—50 gal. S/S 347 agit. tank.
2—Link-Belt Co. ROTARY DRYERS, Roto-Louvre #502-16 Type C, #304 S/S contact parts, #207-10, carbon steel construction, and all auxiliaries.
1—Day #30 Imperial jack. Mixer, 75 gal.
3—Anco 4'x9' Chilling Rolls.
5—Horiz. Dry Powder Ribbon Mixers, 4000#, 1500#, 500#.

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### MILLS—GRINDERS—CRUSHERS

4041 P39—Abbe Porcelain Lined Pebble Mill; 32"x32"
3745C—Two Patterson Buhrstone Line Pebble Mills; 6'x5' and 6'x8' complete with pebbles
M3-M101—Steel Ball Mill; 20"x44" with 3 HP motor
3693—Steel Ball Mill, 34"x38"
3443—International 8'x8' Porc. Lnd. Pebble Mills; 50 HP Gearmotors
3789—Patterson Pebble Mills from 20"x30" to 6'x8'
M3-206—Abbe Steel Mill; 4½'x3'
3564—Abbe 50 gal. Porc. Lined Pebble Mill; 20"x30"
3800—Hardinge Conical Ball Mill with Titanite Liners; 10'x48" with scoop feed and accessories
M14-D2—Patterson 5'x6' Jacketed DJ Ball Mill; Chrome Manganese lined; 25 HP motor
M3-202—Patterson Byerlite Lined Ball Mill; 6'x8'; 50 HP
4147 C9-10—Two Smidth Tube Mills 5'5"x20'; V belt drive
4147 C3-6—Four Gates Tube Mills; 5'x22'
3655 W2—Gruendler Supermaster No. 1 Hammer Mill; 15 HP
4082 A1—Mikro Pulverizer Model 2 S1 Bronze Chamber; PD
M10 D200—Mikro No. 2 SP Pulverizer; 10 HP with 2 HP Pre Crusher
3331—Mikro No. 2 TH screw feed with Pre-Breaker
3324 E2—Mikro No. 4 F Pulverizer; 15"x24"
3868N-1—Fitzpatrick Model D Stainless Comminutator; cooling jacket
M10-202—Fitzpatrick Model K Comminutator with 20 HP motor
3705 L3—Fitzpatrick Homoloid Pulverizer; motorized
1801 N1—Williams Model NF Hammer Mill; 25"x14"; requires 60 HP.
3429 A7—Williams Hammer Mill 36"x18"; requires 60 HP
3429 A-5-6—Williams Hammer Mill No. 4 18"x48" requires 60 HP
4147 C14—Williams No. 6 Hammer Mill
M10-404—Stedman Type A Swing Hammer Mill; 24"x20"; 75 HP
M10-401—Prater Pulverizer Type DS 6 with 30 HP motor
3769—Jay Bee Model 2U Hammer Mill; 10¾"x 14" requires 20 HP
3429 A8—Gruendler Pulverizer 12"x48" requires 150 HP motor
3192 A1—Gruendler Pulverizer No. 3 chamber 8"x16"
3429 A9—Gump Bar Nun No. 46 Hammer Mill; 12"x40"; requires 60 HP
3545—Jay Bee Model A4 chamber 12"x18" with 25 HP motor
M10-183—Jeffrey Swing Hammer Mill Type E 42"x36" for 100 HP motor
3277—Robinson 26" Double Runner Attrition Mill; two 10 H.P. motors
3529W—Bauer 24" Double Runner Attrition Mill with two 20 HP motors
3120—American Ring Roll Crusher; 30"x33" throat; 50 HP
4041 P49—Sturtevant Rotary Fine Crusher, Model "00"; 3,000 tons per hr.
4147 C13—McCully No. 10 Crusher; Belt & P.D.
3315 E2—Williams Ring Roll Mill; ring 3"x10"; with 3 rollers 4" dia. arranged for motor drive
3293 N1—Raymond Imp Mill 9"x18" with accessories
2383—Raymond Model No. 00 Aut. Pulverizer with accessories
3853-S—Raymond No. 50 Stainless Imp Mill with 50 H.P. motor
4066G—Raymond No. 47 Imp. Mills; 50 HP motor
4062 K2-5—Four Raymond No. 32 Imp. Mills; 20 HP motors
MWK-1—Sprout Waldron Roller Mill 2 pair high; 9"x18"; 10 H.P.
4041 P43-44—Two Robinson Unique 4 Roll Mills; 7"x24"; 20 HP
4042 K3—Sprout Waldron 2 Pair High Roller Mill; 9'x18"; 10 HP
3625 D2—Munson Rotary Cutter Size "0" 3½"x 11" feed opening
M10-403—Rietz Disintegrator Model RD8 with 5 HP motor
M10-404—Rietz Disintegrator Model RD12 with 20 HP motor
M10-402—Mitts Merril No. 14 Shredder; motorized

### CENTRIFUGALS

4041/P40—A. T. & M. 12" Stainless Suspended Type Centrifuge
3615—G1—Tolhurst 48" Overdriven; perforated Basket; Rubber cov. 10 HP.
1152 Mc—Bird 48" Rubber Cov. Extractor; with 40 HP 2 speed motor
1152 Mc1—Bird 12" Rubber Lined Centrifuge with extra Imperforate Basket
C5-136—Fletcher 40" Steel Solid Bowl Centrifugal; 20 HP motor
C4-500—Tolhurst 20" Stainless Extractor; Perforated Basket; under driven
C5-191—Tolhurst 26" Suspended with Plow and Scraper; two speed motor
2945 M4—Tolhurst 40" Overdriven; self balancing with Copper Basket, perforated; 7½ HP motor
C4-121—A. T. & M. type 316 S/S Vacuum & Pressure Hoods, 60"; link suspended; 15 HP 2 speed motor
C5-200—A. T. & M. 40" Stainless Suspended Type Centrifugals; bottom drum; with 40 H.P. motor
C6-201—Three Podbielnik Centrifugal Counter Current Solvent Extractors; 100 PSI seal pressure; 32"x37"x54" overall
C5-205—A. T. & M. 42" Suspended Centrifuge; Perforated Basket; 40 HP
4042/K1—A. T. & M. Stainless Suspended Centrifuge; 30"x15"; 20 HP

### EVAPORATORS—VACUUM PANS

SPECIAL:—Zaremba Double Effect INCONEL Evaporator with calandria; 430 sq. ft. of surface; with accessories; print available
3274—Swenson Quadruple Effect Long Tube Evaporator; film type
3475—Zaremba Single Cast Iron Evaporator; 130 sq. ft. Copper Tubes
2895—Devine Single Cast Iron Calandria type; 28"x8'
3515—Acme 1600 Gal. Copper 6'x10', coils, barometric condenser, etc.
3557—Croll Reynolds Vac. Evaporator; 30"x5' MONEL with accessories
3670—Copper Vac. Evaporator; 66"x73" coils, heat exchanger
487—Zahn & Nagel Continuous Evaporator; 2500 lbs. per hour
3497 S7—Jacketed Crystallizing Evaporators; 24"x21"x12' long
E 12-200—Buffalo Monel Evaporator, 290 sq. ft.
3340—Brand NEW Stainless Steel Kettles good for 100± always in New York stock; sizes up to 500 gal. immediately
3926—Stainless Clad 80 gal. steam jacketed Kettles; 40±
4041 P35—Four Glass Lined 100 Gal. 31"x36" Jktd. Kettles
4041 P46-47—Two Stainless Jacketed & Agitated Pasteurizing Kettles; 46"x30"
3444—Pfaudler Glass Lined Jktd. 350 Gal. Kettle 54"x36"; agitated
3750 FRF—Pfaudler 1000 Gal. Glass Lined Reactor Type XL 66"x66" with 5 HP motor
3597—Special Lot of Copper Jacketed Kettles from 10 gal. to 250 gal.
3218—5200 Gal. Steel Jacketed Closed Top Kettles; 9'6"x9'10½"
3247—Aluminum Steam Jacketed Kettles from 25 gal. to 250 gal.
9908 H3—Aluminum Vacuum Pan 250 Gal. 40"x 60"; Jacketed

### REACTORS

3424 K4—Stainless Reactor; with coils agitated; 24"x48"
3824S-12—Pfaudler Glass Lined Jacketed Agitated Reactor; 12"x12"
3824S-14—Pfaudler Glass Lined Jacketed Reactor; 36"x36"
3673 L9—Pfaudler Glass Lined Jktd. Reactor; 16"x28"
3670—Steel Reactor 4'x4' heated with copper coil unit
3944 B2—Steel Jacketed and Agitated Reactor; 315 Gal.; 44"x48"
3168—Stainless 500 Gal. Jacketed Reactor; 6' dia. x 30" straight side
3168 D7—Dopploy Jacketed Reactor
3390—Buffalo 500 Gal. New Jktd. Agtd. Reactor; 4'x5'2" motorized
3544—Pfaudler Glass Lined Reactor; 400 Gal. Type EL; 4'x4'; steam Jacketed
3434—Dopp 650 Gal. Cast Iron Full Jktd. Agitated Reactor; 80"x67"
3994 K5—Monel Reactor 785 gal. 5'x5'; Jktd.; Agtd.
3934 C41—Steel Reactor; 950 Gal. 5'x5'6"; agitated; coil heated
4113 D1-2—Two Struthers Wells Stainless Vacuum Pans, 5'x12'8" high with Calandria section 350 SS 2" tubes; 630 sq. ft. 200 PSI
R4 503—Lead Lined Reactor; 1000 Gal. 4'x6'; Jktd. ASME 50 PSI
R4-500—Lead Lined Reactor; 1850 Gal. 6'6"x 6'6"; Jacketed and agitated 10 HP motor
3113 E2—Copper Vacuum Pan; coil heated; 2000 Gal. 7' diameter
3799V-1—Lancaster Stainless Lined Rotary Reactor; Jktd.; 50"x17'4" 300 PSI internal
3870M-2—Mojonnier Stainless Vacuum Pan, 3'x10'
3434—Dopp 650 Gal. Cast Iron Jacketed and Agitated Reactor
R4-530—Stainless Resin Kettle; 500 Gal. with Condenser and agitator
R4-311—Aluminum Pressure Vessel 800 Gal. 51"x98" Jacketed
3934 C6—Bethlehem Reactor 1400 Gal. Steam Coils Cast in shell
R4 505—Devine 1500 Gal. Vertical Nitrating Kettle; 6'x8'6"; Jktd.
R4 507—Dowtherm Jktd. Stainless Agtd. Kettle; 2500 Gal. with accessories
3598—2600 Gal. Steel Jktd. Agitated Pressure Vessel

### COLUMNS AND STILLS

3984R—Stainless Steel Columns; 8"x10' and 12"x15'
C13-200—Stainless Steel Generating Column; 48"x31' high flanged and bolted sections
3476—Copper Jacketed Still Pot; 28"x25" with condenser
3659 R3—Aluminum Bubble Cap Column; 27½" x36'; 60 plate
C13-140—Stokes Copper Bubble Cap Column; 36"x18'
C14-141—Stainless Packed Column; 24"x14' insulated
C14-220—Stainless Packed Column; Raschig rings; 4"x10' with Still Pot
C-13-162—Steel Bubble Cap Column; 48"x37' high with accessories
C14-151—Solvent Recovery Absorber; 8'x28' with accessories
C14-153—Gas Saturating Tower; 8'x36'6"; 5 PSI
C13-201—Copper Distillation Column; 24"x15'; 16 bell plates
9908 H3—Aluminum Steam Jacketed Vacuum Still; 40"x60"
E13-162—Nickel Clad Evaporating Still; 6'6"x10'
3470—Stainless Steel Bubble Cap Column; 16 sections; 8⅝"x19' high

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# EQUIPMENT
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6—Stainless Steel Heat Exchangers, 15 to 90 sq. ft.

2—Stainless Steel 70 gal. Jacketed, Agitator Reactors.

1—AT&M 18" Stainless Steel type 316 Suspended Centrifuge w/motor.

1—Ames 40 HP Package Boiler, 100 psi.

1—Pfaudler Storage glass lined Tank, 1000 gal.

6—Pfaudler glass lined Vacuum Receivers, 50 gal each (New).

1—Groen S.S. Jacketed Kettle 40 gal. with agitator and drive.

5—S.S. Jacketed 380 gal. Kettles.

1—Plate Fabricators Steel Jacketed Kettle 6000 gal.

1—Nooter Steel Jacketed Kettle 750 gal. 75 PSI.

1—Patterson Kelly Steel Jacketed 1500 gal. Kettle 75 PSI.

2—Steel Jacketed Crystallizing Dishes 4'x2' with Netco Drive.

1—Read S.S. Double Arm Jacketed Sigma Blade Vacuum Mixer 10 gal.

1—Pfaudler 500 gal. Glass lined jacketed Reactor 75 psi.

1—Stainless Steel 4000 gal. Horz. Storage tank 5' x 25'.

1—Baker Perkins 20 gal. Double Arm Sigma Blade Mixer, w/X. P. drive.

2—Day Gearless Pony Mixers 50 gallon, with Explosion Proof Motor.

1—Day S.S. Double Arm Jacket Mixer Sigma Blades, 50 gal.

1—Struther Wells Northmaster Vacuum Mixer Double Arm Dispersion Blades, 50 gal.

1—Stokes Model 114-5 Cooling Drum 5' x 13'-6".

3—Sharples #16 Stainless Steel Super Presurtite Centrifuges.

1—Day Steel Jacketed Double Arm Sigma Blade Mixer, 75 gal.

1—Read Double Arm Sigma Blade Jacketed Mixer, 50 gal.

4—Baker Perkins Double Arm Jacketed Sigma Blades Mixers, 100 gal.

1—Lancaster S.S. Laboratory Muller Mixer.

6—Simpson #0 and #1 Intensive Mixers.

1—Feinc type 316 S.S. Rotary Vacuum Filters, String Discharge, 6'6" x 6'.

2—Buflovak single door Vacuum Shelf Dryers, 20 shelves.

1—Devine single door Vacuum Shelf Dryer, 10 shelves.

1—Feinc type 304 S.S. Rotary Vacuum Filter String Discharge 3' x 3'.

2—Buflovak 24" x 36" Chrome Plated Double Drum Dryers Complete.

1—Buflovak single door Vacuum Shelf Dryer, 5 shelves.

1—Devine Laboratory Vacuum Shelf Dryer, 3 shelves (New).

1—Devine Rotary Vacuum Dryer, 5' x 25'.

1—Stainless Steel Rotary Vacuum Dryer, 3' x 12'.

1—Stokes Heresite lined Rotary, Vacuum Dryer, 3' x 15'.

1—Oliver 3' x 6' Rubber Covered Vacuum Filter complete.

1—Buflovak 32" x 90" Double Drum Dryer.

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# TOPS IN USED EQUIPMENT!

1—Bowen S/S spray dryer 10' dia.

1—Sharples Super-D-Hydrator C20, HP XP motor, SS Constr.

2—Fitz comminuters style D 7½ HP explosion proof motors.

7—Karbate heat exchangers, 20.6 sq. ft. & 70.6.

1—Morehouse speed line mill, 20 HP.

2—Baker Perkins 100 gal. sigma blade vac. mixer, one new.

4—Patterson 4' x 4' chrome manganese jacketed ball mills, 225 gals.

2—Patterson 30" x 42" 50 gal. Porcelain pebble mill.

1—Simpson #2 mixer, MD.

2—1-40" link suspended SS centrifuge, 7½ HP motor.

2—7500# dry powder mixers, double ribbon type.

5—48" x 120", 24" x 36", 32" x 52" DBLE drum dryers, one vacuum.

6—Hersey, Ruggles Coals & Louisville 3' x 24', 4' 6' x 30', 4' x 40' and 6' x 40' dryers, monel, S/S lined, & steel.

1—New Shriver 32" x 32" side fee, open delivery, 2" frame.

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## *Miller Law Exemptions*

—Continued from page 3

ests of public health will not be jeopardized by the extension.

- There should be evidence about the amounts of residues which remain in or on food from use of a pesticide chemical and about its chronic toxicity before an extension is granted.
- Extension should not be granted for a pesticide chemical which causes alarming symptoms in test animals (cancer or blood disorders, for example) in any dosage, unless experimental data show a level of feeding to test animals that is safe.
- Where a tolerance has been set for residues of a pesticide chemical on one or more raw agricultural commodities under the Federal Food, Drug, and Cosmetic Act, and the other criteria of this statement of policy are met, the effective date may be extended for other uses of the pesticide chemical.
- Extension should be granted only for uses of a pesticide chemical registered with the Department of Agriculture under the federal insecticide, fungicide, and rodenticide act of 1947 (61 Stat. 163; 7 U.S.C. 135) prior to the 1955 growing season (prior to May 1, 1955).
- Extension should be granted only to the end of the 1955 growing season, because longer extensions would result in confusion during the 1956 growing season. The principal growing season in the United States ends by October 31.
- Notice of the decisions of the department on requests for extensions will be published in the *Federal Register.*

**Requirements for Requests**

Each request for an extension should be addressed to the Commissioner of Food and Drugs and should give (1) the name and chemical composition of the pesticide chemical for which extension is requested, (2) a list of uses for which extension is requested and evidence that these uses were registered under the federal insecticide, fungicide and rodenticide act prior to May 1, 1955, (3) information about the amounts of residues that are expected to remain on raw agricultural commodities from these uses, (4) available information which indicates that these residues will not jeopardize the public health, and (5) a statement of the reason a tolerance or exemption from the requirement of a tolerance has not been requested.

In order that decisions on requests for extensions may be published before July 22, requests and supporting data should be submitted before June 27.

Use during the 1955 growing season of a pesticide chemical for which extension is granted may yield a raw agricultural commodity which bears residues of the chemical. In such case, it was stated, the commodity will not be considered adulterated even though it is marketed after the growing season, provided the commodity would have been legal in interstate commerce during the 1955 growing season.

The department said that it was decided against granting extensions beyond October 31 in order to avoid confusion in 1956. It recommended that states prepare spray schedules for the 1956 growing season which direct (1) pesticide uses that leave no residues at time of harvest or (2) the use only of pesticides for which tolerances have been established or exemptions granted.

## *William Drake Takes Over*

—Continued from page 5

at Bowdoin College, started as a maintenance worker at the company's Wyandotte, Mich., works, and after three years of diversified production experience was assigned to supervisory duties in the chemical specialties department. In 1941, he became manager of that department and subsequently served as assistant vice-president and vice-president in charge of all company sales.

In 1952, he represented his industry in the Office of Price Stabilization as director of the rubber, chemicals and drugs division. When Pennsalt decentralized its operations in 1954, Mr. Drake became general manager of the company's largest operating unit, the industrial chemicals division.

To facilitate gradual transfer of responsibility and the projection of long-range expansion plans, Mr. Drake in February (OPD, 2/28/55) was appointed executive vice-president and elected to the board. His assumption of complete responsibility for the company's multi-plant operations will follow by one week the relocation of its executive offices to 3 Penn Center plaza.

## *FDA Is Planning to Ease*

—Continued from page 3

0.25 percent of isoamylhydrocupreine and 1.0 percent of zolamine hydrochloride.

If the preparation is in suppository form, it contains not more than 5.0 milligrams of isoamylhydrocupreine and not more than 20.0 milligrams of zolamine hydrochloride per suppository.

The preparation is labeled with adequate directions for use in the temporary relief of local pain and itching associated with hemorrhoids.

The directions provide for the use of not more than two suppositories or two applications of ointment in a twenty-four-hour period.

The labeling bears, in juxtaposition with the dosage recommendations, a clear warning statement against use of the preparation without medical supervision in case of rectal bleeding, as this may indicate serious disease.

## *US Green Light to Sell*

—Continued from page 3

in patent contracts. In explanation of this exclusion, a memorandum from the State department stated as follows:—

"It has been the policy of the United States since 1942 to make the patents and technology vested from World War II enemy nationals readily available to American industry by means of revocable non-exclusive royalty-free licenses for the life of the patents. This policy has been widely publicized and has been relied upon by licensees in making investments to develop and exploit the patents. The exclusion of patent interests from the return program is thus in keeping with the government's long-time policy and will serve to safeguard the interests of American licensees."

### *Trade Briefs*

**Great Northern Oil Company,** St. Paul, Minn., has named P. A. Nolan chief chemist.

**Khioda Chemical** Engineering Company of Japan has proposed to the Para State Government of Brazil to build a petroleum refinery at Belem capable of refining 40,000 barrels daily.

## *Argentina Tung Oil Report*

—Continued from page 7

before November 1, and that the carryover at that time will be about 8,000 tons of oil. The Argentine tung oil position from May 25 to November 1 of this year was estimated in short tons by Mr. Hougen as follows:—

**Argentine Tung Oil Position**

| | |
|---|---|
| Supply— | |
| Stocks, May 25 | 4,900 |
| Production, May 25-November 1 | 6,600 |
| Total | 11,500 |
| Disappearance:— | |
| Exports, May 1-November 1— | |
| To United States | 2,200 |
| To other | 800 |
| Domestic use | 500 |
| Total | 3,500 |
| Estimated oil on hand, November 1 | 8,000 |

It is estimated that 17,400,000 pounds (8,700 short tons) of tung oil have been imported from Argentine during November, 1954-April, 1955. This is about 72 percent of the agreed maximum of 10,900 tons that may enter the United States from Argentina by October 31.

It is reported that there has been some interest in the purchase of Argentine tung oil for export to European destinations. Tung oil exports to all destinations reached 13,400 tons in 1954, probably a record for Argentina.

## *Plant Food Institute Elects*

—Continued from page 7

farm program. In this cause, he added, misinformation and prejudices are now being spread over the country to bring about a depression in agriculture.

"Those who live in industrial areas and consuming centers," Rep. Cooley declared, "are being told in effect that farmers are parasites and are living high on government checks, the farmer is preying upon the public, and that the farm program is responsible for the high cost of living.

"There are those in high places who are making laborious efforts to bring about a revolt on the part of city consumers. They are trying desperately to divide farmers into groups in the hope that they might bring about utter destruction of the entire farm program."

**Public Relations for Farmers**

Mr. Cooley called upon the institute and all industries closely allied with agriculture to join with farmers "to tell the truth about agriculture." He proposed a positive, non-political public relations program for farmers "to plant the truth about agriculture wherever it cannot be found."

Assistant Secretary of Agriculture E. I. Peterson told the convention that "the price support policy of the Department of Agriculture is emerging as a dynamic, positive operation in the development of a sound agricultural economy." He added that USDA policy today "is not in any way based on a desire to do away with price supports or to discredit them."

"We believe price supports are a market facilitating mechanism," he explained. "They should not be perverted to other purposes. We have, of course, a great deal of discretion in the support of many commodities. The policy is about as follows:—

"To make use of price supports, where discretion exists, at a level as high as possible and still move the agricultural commodities to market without creating unmanageable surpluses in government hands. The levels we are setting are intended to permit producers to market these commodities in an orderly manner. They provide not only the opportunity of preventing gluts of marketing time, but also the financial means to carry out orderly marketing through loans."

## *Chemical Merger Reasons*

—Continued from page 5

nels of distribution; but they are the companies usually which produce and sell the line—buying the basic ingredients from giant chemical companies, and fabricating them for ultimate use."

From the point of view of the big corporations, the swallowing up of smaller firms is desirable, Commercial Discount maintained, "to provide greater assurance for an outlet for their raw materials." Some of the smaller companies accept this merger idea, it was added, because it relieves them of their financial worries.

However, the Chicago financial house was of the opinion that the merger movement in the chemical industry will "probably slow up" because of the growth in accounts receivable financing. This, it was argued, will allow the smaller chemical firms "to continue expanding until they are large enough to receive public financing."

## Advertisers Index


Aaron Equipment Company..... 66
American Agricultural Chemical Co., The.. 1
Archer-Daniels-Midland Company..... 65

Baker, J. T., Chemical Co.....1, 46
Barclay Chemical Company, Inc..... 70
Bareco Oil Co..... 39
Barium & Chemicals, Inc..... 36
Barrett Division, Allied Chemical & Dye Corporation ..... 44
Benzol Products Company..... 54
Berkshire Chemicals, Inc..... 50
Better Finishes & Coatings, Inc..... 37
Bios Laboratories, Inc..... 50
Bower, Henry, Chemical Mfg. Co..... 36
Bowman, Charles, & Co..... 50
Bradley Mining Co..... 63
Brill Equipment Company..... 67
Brode Corporation, The..... 65
Browning Chemical Corp..... 19

Carbide & Carbon Chemicals Company, Division Union Carbide & Carbon Corporation .....2, 40
Celanese Corporation of America, Chemical Division ..... 72
Chemical Affiliates, Inc..... 36
Chemical Divisions, Food Machinery & Chemical Corporation..... 33
Chemical & Process Machinery Corp..... 69
Chemical Service Corp..... 70
Chemical Solvents, C. P., Incorporated..... 72
Chemirad Corporation..... 41
Chemsol, Inc..... 70
Church & Dwight Co., Inc..... 34
Cleveland Steel Barrel Co., The..... 38
Coal Chemical Sales Div., United States Steel Corp. Subsidiaries..... 45
Columbia Southern Chemical Corporation.. 34
Commercial Solvents Corporation..... 6
Connelly, Inc..... 45
Consolidated Chemical Industries, Inc..... 36
Consolidated Products Company, Inc..... 68
Consulting Chemists and Engineers..... 55
Continental Oil Company..... 24
Corn Products Refining Company..... 54
Cornwell Chemical Corp..... 72
Coupe, Robert A..... 43
Croda, Incorporated..... 65

Darlington Chemicals, Inc..... 51
Distillation Products Industries, Div. of Eastman Kodak Company..... 42
Dunkel, Paul A., & Company, Inc..... 51
Du Pont de Nemours, E., I., & Co., (Inc.) .....17, 21, 40

Eastman Chemical Products, Inc.....16, 61
Emery Industries, Inc..... 64
Equipment Clearing House, Inc..... 66
Esso Standard Oil Co..... 25

Fairmount Chemical Co., Inc..... 40
Fallek Products Co., Incorporated..... 54
Felton Chemical Company, Inc..... 58
Fezandie & Sperrle..... 63
Fine Organics, Inc..... 53
First Machinery Corp..... 68
Florasynth Laboratories, Inc..... 56
Fritzsche Brothers, Inc..... 56
Frosst, Charles E., & Co..... 53

Gane & Ingram, Inc..... 50
Gas Purifying Materials Co., Inc..... 37
Gelb, R., & Sons, Inc..... 69
General Tire & Rubber Company, The..... 34
General Traders, Inc..... 68
Greeff, R. W., & Co.....1, 51
Gregory, Walter C., Corporation..... 53
Gross, A., & Company..... 65

Halby Chemical Co., Inc..... 38
Harchem Division, Wallace & Tiernan, Inc.. 64
Harshaw Chemical Co., The..... 31
Heat & Power & Co., Inc..... 67
Heyden Chemical Corporation..... 47
Hoffmann-La Roche, Inc..... 8
Holliday, L. B., & Co., Limited..... 45
Hooker Electrochemical Company..... 37
Horn, Jefferys & Co..... 60
Hutchinson, D. W., & Co., Inc..... 56

Industrial Raw Materials Corp..... 72
International Minerals & Chemical Corporation ..... 12

Jefferson Chemical Company, Inc..... 18

Lawler Company..... 67
Lever Brothers Company..... 41
Lithium Corporation of America, Inc..... 20
Loeb, H., & Son..... 66
Loeb Equipment Supply Co..... 67
Lucidol Division, Wallace & Tiernan, Incorporated ..... 42

Machinery & Equipment Corp..... 66
Magnus, Mabee & Reynard, Inc..... 56
Mallinckrodt Chemical Works..... 62
Mantrose Corporation, The..... 60
Mathieson Chemicals, Olin Mathieson Chemical Corporation..... 28
McKesson & Robbins, Incorporated..... 47
Meer Corporation..... 48
Metalsalts Corporation..... 51
Michigan Chemical Corporation..... 49
Monsanto Chemical Company.....45, 50
Mutual Chemical Division, Allied Chemical & Dye Corporation..... 63

National Aniline Division, Allied Chemical & Dye Corporation..... 11
National Milk Sugar Company..... 41
Neville Chemical Co..... 59
New Jersey Zinc Company, The..... 61
Newman Tallow & Soap Machinery Co., Inc. 66
Niagara Alkali Company..... 29
Nitrogen Division, Allied Chemical & Dye Corporation .....37, 42
Norda Essential Oil & Chemical Company, Inc. ..... 57

Ohio-Apex Division, Food Machinery and Chemical Corporation..... 62
Olin Mahtieson Chemical Corporation Industrial Chemicals Division..... 28
Orbis Products Corporation..... 58
Oronite Chemical Company..... 13

Pacific Coast Borax Co..... 1
Parsons-Plymouth, Inc., M. W..... 62
Penick, S. B., & Company..... 48
Pennsylvania Industrial Chemical Corp.... 59
Pennsylvania Refining Company..... 39
Perry Equipment Corp..... 68
Pfaltz & Bauer, Inc..... 53
Pfizer, Chas., & Co., Inc..... 15
Philipp Brothers Chemicals, Inc..... 60
Polak & Schwarz, Inc..... 58
Potash Company of America..... 43
Prior Chemical Corporation..... 1
Process Plants Service, Inc..... 68
Procter & Gamble Co..... 41
Publicker Industries, Inc..... 10
Purocaine, Inc..... 50

Quaker State Oil Refining Corp..... 38

Raney Catalyst Co..... 42
Read, Chas., L., & Co., Inc..... 43
Richmond Mica Corp..... 60
River Plate Corporation, The..... 57
Robeco Chemicals, Inc..... 72
Rohm & Haas Company..... 22
Rosen, Karl B., & Co., Inc..... 53

Samuel, Frank, & Co..... 53
Sergeant, E. M., Pulp & Chemical Co., Inc.. 36
Sharples Chemicals, Inc..... 1
Sheffield Chemical Company, Inc..... 41
Shell Chemical Corporation..... 27
Shell Oil Company..... 39
Sinclair Chemicals, Inc..... 26
Snell, Foster D., Inc..... 71
Spencer Chemical Company..... 38
Stauffer Chemical Company..... 35
Stein Equipment Co..... 66
Sterwin Chemicals, Inc..... 58
Strohmeyer & Arpe Co..... 64
Sunkist Growers, Inc..... 23
Synthetic Products Company..... 60

Texas Gulf Sulphur Co., Inc..... 43
Thurston & Braidich..... 49
Todd, A. M., Company..... 56
Tragacanth Importing Corp..... 53
Treen Box Co..... 36
Truland Chemical & Engineering Co., Inc.. 66

Ungerer & Co..... 58
Union Carbide & Carbon Corporation, Carbide & Carbon Chemicals Company Division .....2, 40
Union Standard Equipment Co..... 69
United States Potash Company, Incorporated 43
U. S. Steel Corporation Subsidiaries, Coal Chemical Sales Div..... 45

van Ameringen-Haebler, Inc..... 58
Versenes—The Dow Chemical Company..... 35

Will & Baumer Candle Co., Inc..... 64
William, C. K., & Co..... 62
Wilner Wood Products Co..... 62
Wirz, A. H., Inc..... 42
Wood, Alan, Steel Company..... 45
Wyandotte Chemicals Corporation..... 36

Ziegler, G. S., & Company..... 62
Zinsser & Company, Inc..... 63


## *FTC's Hand Stronger*

*—Continued from page 4*

the Clayton act do not become final by a lapse of time. Accordingly, in a case where a Clayton act order is being flouted by the respondent, the commission may informally attempt to obtain voluntary compliance. That course failing, the commission is obliged to proceed to a US Court of Appeals to prove that its order is being violated. Even though such a proof is made, court enforcement of the order does not necessarily commence forthwith.

"Instead, the court may decide to undertake what amounts to a de novo consideration of the antitrust issues in the case. Then, the court may issue a formal decree adopting the commission's order as its own. Thereafter, enforcement requires the use of contempt proceedings for violation of the court's decree.

**Plight of Small Businessmen Cited**

"Bearing in mind," Sen. Sparkman said, "that commission orders pursuant to the Clayton act are intended to remedy such grievous antitrust wrongs as monopolistic mergers, exclusive dealing arrangements, and unjustified price discriminations, efforts to obtain full compliance with such orders ought not to be fraught with such legalistic difficulties. After all, delayed justice in antitrust matters can only mean no justice at all to the small businessmen who are so often the victims of the prohibited practices."

## *Trade Agreements Measure*

*—Continued from page 3*

law and to report back to congress in a year.

The trade agreements bill sent to the President provides for a three-year extension of the trade agreements law that expired June 12, and permits a decrease in tariffs in effect last January 1 of 15 percent at the rate of 5 percent a year. Products contained in the new Japanese trade agreement and the supplemental agreement with Switzerland can not be reduced more than 15 percent below the new rates contained in those agreements.

To meet the demands of the coal and oil producers, the extension law provides authority to the President to establish quotas on imports of any products entering the country in such quantities as to threaten national security.


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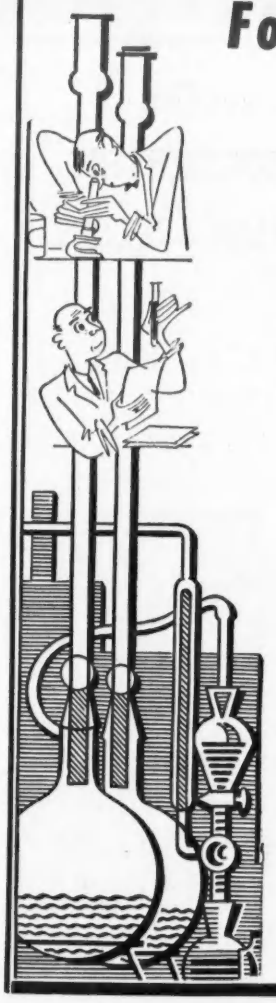

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CABLE ADDRESS "RODRUG" N. Y. ALL CODES

MUrray Hill 3-7500

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**Sulphuric Acid** From 60° to 65% Oleum

**Nitric Acid**

**Muriatic Acid** 18°-20°-22°

**Phenol Sulphonic Acid**

*in Tank Cars—Tank Transports*

**ELECTROLYTE ACID**

(Any Strength)

1 qt. Polyethylene Bottles — 12 to the case — ICC Approved

5-pint Glass Bottles — 2 to the case — ICC Approved

**CORNWELL CHEMICAL CORP.** EXECUTIVE OFFICES... 24 EAST 38th ST., NEW YORK, N.Y. MUrray Hill 3-0174

SALES OFFICES...Philadelphia, Pa.—Orchard 3-2088 • 744 Broad St., Newark, N. J.—Market 4-2776 Cornwells Heights, Pa.—Orchard 3-2077

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**Celanese* acetyl production *delivers*— for all industries**

Celanese, dependent only on natural petroleum sources and Celanese-produced intermediates, can synthesize every important acetyl chemical and produce it in continuous volume.

Our two plants—at Bishop and Pampa, Texas—are a dual dependable source for:

ACETIC ACID
ACETALDEHYDE
ACETIC ANHYDRIDE
ACETONE
n-BUTYL ACETATE
n-PROPYL ACETATE

Celanese CHEMICALS

*Reg. U. S. Pat. Off.

Celanese Corporation of America • Chemical Division • 180 Madison Avenue, New York 16

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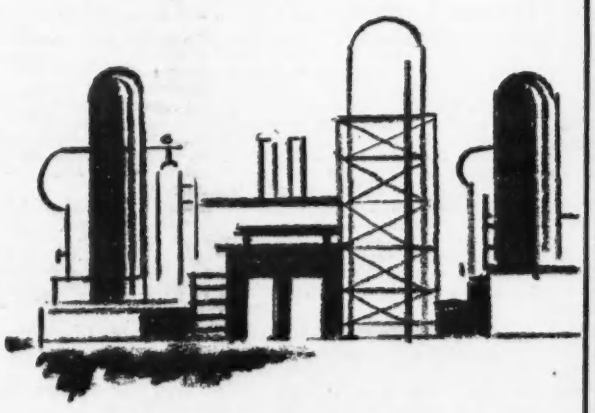
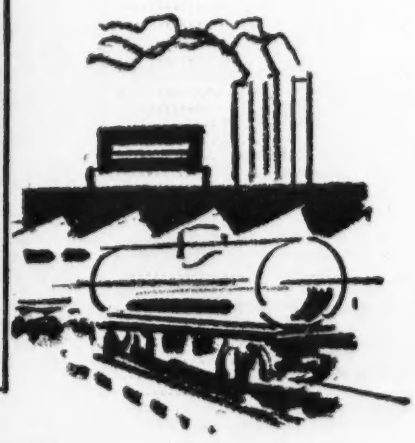


**IRM WAXES**



Prepared expressly to your specifications

**Paraffin Waxes**

**Microcrystalline Waxes**

**Laminating Waxes**

**Dip Waxes**

**Barrier Waxes**

*All specifications required for micros and blends.*

IRM **INDUSTRIAL RAW MATERIALS CORP.**

575 Madison Avenue, New York 22, New York • Plants: Lyndhurst, New Jersey - Titusville, Pennsylvania - New Orleans, La.